


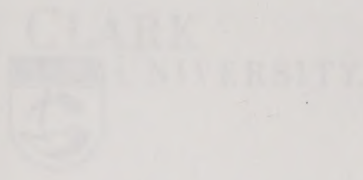


CLARK UNIVERSITY™

ACADEMIC CATALOG 2002-2003



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Academic Catalog 2002-2003

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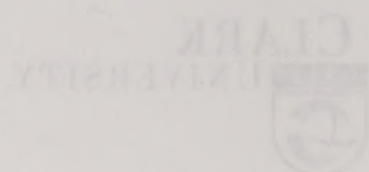
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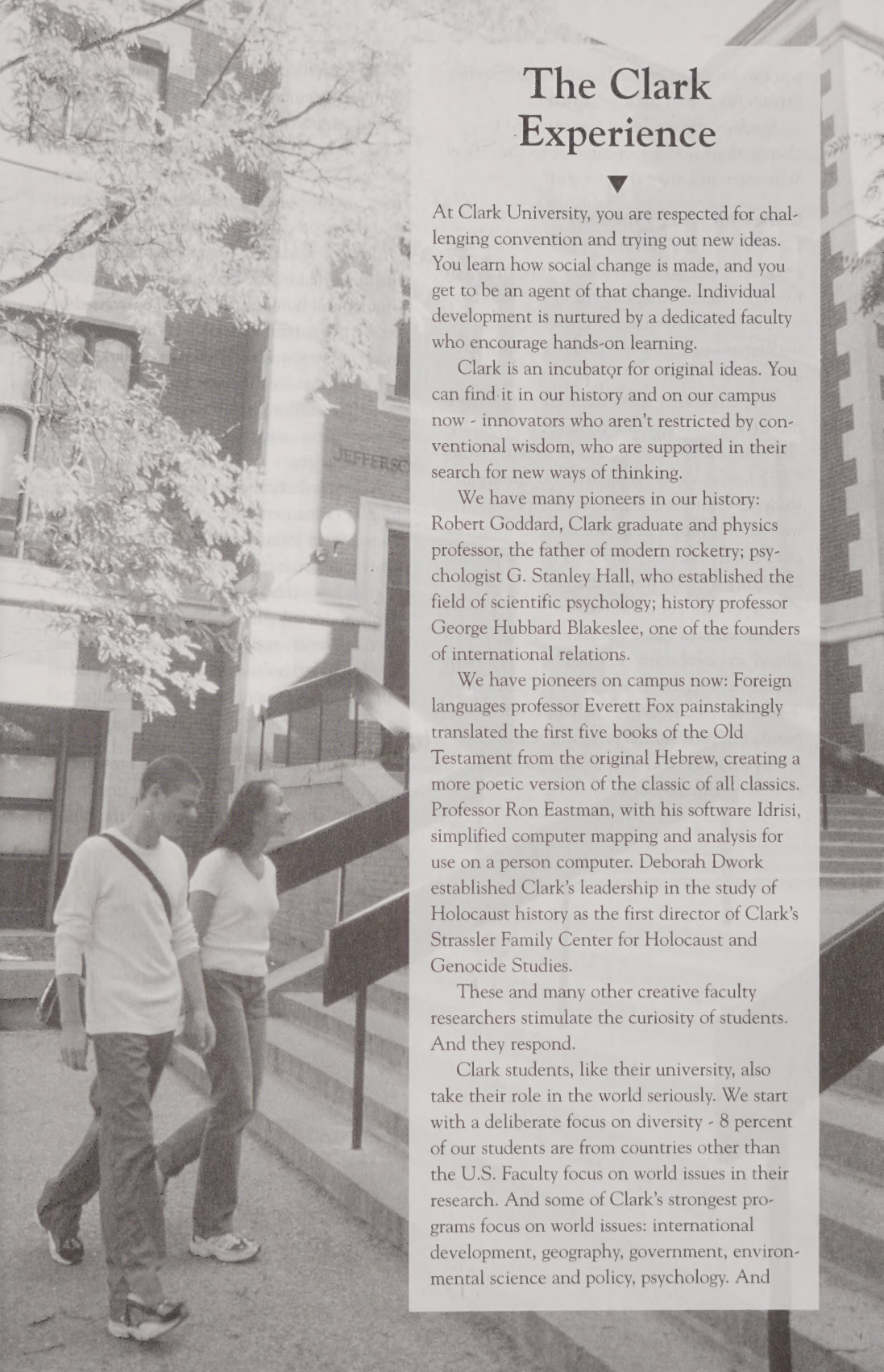
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The Clark Experience

At Clark University, you are respected for challenging convention and trying out new ideas. You learn how social change is made, and you get to be an agent of that change. Individual development is nurtured by a dedicated faculty who encourage hands-on learning.

Clark is an incubator for original ideas. You can find it in our history and on our campus now - innovators who aren't restricted by conventional wisdom, who are supported in their search for new ways of thinking.

We have many pioneers in our history: Robert Goddard, Clark graduate and physics professor, the father of modern rocketry; psychologist G. Stanley Hall, who established the field of scientific psychology; history professor George Hubbard Blakeslee, one of the founders of international relations.

We have pioneers on campus now: Foreign languages professor Everett Fox painstakingly translated the first five books of the Old Testament from the original Hebrew, creating a more poetic version of the classic of all classics. Professor Ron Eastman, with his software Idrisi, simplified computer mapping and analysis for use on a person computer. Deborah Dwork established Clark's leadership in the study of Holocaust history as the first director of Clark's Strassler Family Center for Holocaust and Genocide Studies.

These and many other creative faculty researchers stimulate the curiosity of students. And they respond.

Clark students, like their university, also take their role in the world seriously. We start with a deliberate focus on diversity - 8 percent of our students are from countries other than the U.S. Faculty focus on world issues in their research. And some of Clark's strongest programs focus on world issues: international development, geography, government, environmental science and policy, psychology. And

you can be a part of the International Studies Stream no matter what your major.

Students themselves are motivated to change their world - on campus, in the city of Worcester and around the world.

Clark University's mission

Clark University's mission is to educate undergraduate and graduate students to be imaginative and contributing citizens of the world, and to advance the frontiers of knowledge and understanding through rigorous scholarship and creative effort.

The University seeks to prepare students to meet the challenges of a complex and rapidly changing society. In students as well as faculty, Clark fosters a commitment to excellence in studying traditional academic disciplines, as well as innovation in exploring questions that cross disciplinary boundaries. The free pursuit of inquiry and the free exchange of ideas are central to that commitment.

The focus of Clark's academic program is a liberal arts education enriched by interactions among undergraduate students, graduate students, and faculty, and closely linked to a select number of professional programs. Clark also serves students who wish to continue formal education throughout their lives.

The intellectual and personal growth of students is enhanced by a wide variety of educational programs and extracurricular activities. Clark believes that intellectual growth must be accompanied by the development of values, the cultivation of responsible independence, and the appreciation of a range of perspectives.

Clark's academic community has long been distinguished by the pursuit of scientific inquiry and humanistic studies, enlivened by a concern for significant social issues. Among many other scholarly endeavors, Clark contributes to understanding human development, assessing relationships between people and the environment, and managing risk in a technological society.

Clark is dedicated to being a dynamic community of learners able to thrive in today's increasingly interrelated societies. The University maintains a national and international character, attracting high-caliber students and faculty from all quarters of the globe. As a university residing in an urban context, Clark also strives to address the needs and opportunities of contemporary urban life.

History

Clark University is a teaching and research institution founded in 1887 as the first independent, all-graduate university in the United States.

Clark's first president was G. Stanley Hall, founder of the American Psychological Association, who earned the first Ph.D. in psychology in this country at Harvard. Clark has played a prominent role in the development of psychology as a distinguished discipline in the United States. Clark was the location for Sigmund Freud's famous "Clark Lectures" in 1909, introducing psychoanalysis to this country.

Clark also has played an important role in the development of geography as a discipline. Clark has granted more Ph.D.s in this environmentally related area than any other school in the nation. The George Perkins Marsh Institute was the first research center created to study the human dimensions of global environmental change.

Researchers who have held Clark appointments include A.A. Michelson, the first U.S. Nobel Prize winner in the sciences and Robert Goddard, the father of the space age and the inventor of rocket technology. Other researchers at Clark measured the windchill factor, defined chemical double bonding, developed research leading to the birth control pill, and made the first breakthrough in understanding how brain tissue regenerates itself.


Accreditation

Clark University is accredited by the New England Association of Schools and Colleges, Inc. through its Commission on Institutions of Higher Education.

Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer-review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Inquiries regarding the accreditation status by the New England Association should be directed to the administrative staff of the institution. Individuals may also contact:
Commission on Institutions of

Higher Education
New England Association of Schools
and Colleges
209 Burlington Road
Bedford, MA 01730-1433
(617) 271-0022
E-mail: cihe@neasc.org



The Academic Program



Clark's strength is its ability to combine high-quality liberal arts education with personal attention and advanced study opportunities. Clark has developed a unique Program of Liberal Studies that provides a solid foundation for advanced study. Within the program, students choose from a range of courses designed to foster their critical thinking skills and broaden their perspectives. Because they can choose among many different courses, students can take classes that interest them and, at the same time, satisfy their broad liberal arts requirements.

By the spring of sophomore year, students declare a major, in which they develop depth and expertise. The University offers 27 majors, 23 minors and 12 interdisciplinary concentrations, which can be combined to match individual interests and academic goals. These are at the heart of the advanced studies that distinguish Clark. Once students choose a major, their academic department becomes their intellectual "home," where they are able to work closely with faculty on research and other creative projects. As students acquire increasing depth and sophistication in a field of their choosing, they are able to take advantage of Clark's wide array of courses to construct a program of study uniquely suited to their interests and career goals. In many fields, students have the opportunity to enter an honors program or accelerate to an advanced degree.

Program of Liberal Studies

The foundation of a Clark undergraduate education is the Program of Liberal Studies. Through the program, students acquire the intellectual habits, skills, and perspectives that are essential for self-directed learning. They are given a framework within which they can select a program of study and receive a broad introduction to liberal and lifelong learning. Students have the option of fulfilling the

requirements of the Program of Liberal Studies, through the “International Studies Stream,” which consists of courses that prepare them to better understand global political, cultural, and economic issues (see page 21).

The Program of Liberal Studies has two components:

1. Critical Thinking courses: While every course in the University involves work in critical thinking, two types of courses place special emphasis on the cultivation of these skills.

Students take courses in each of these areas:

A. Verbal expression: Courses that place special emphasis on the relationship between writing and critical thinking within a particular discipline.

B. Formal analysis: Courses that place special emphasis on logical and algebraic modes of thinking. These courses are found in several different departments.

All new students entering Clark are required to demonstrate basic competency in mathematics and quantitative thinking. Some students demonstrate this competency through achieving a satisfactory score on a standardized test or a Clark placement test. Others are required to successfully complete the IDND17 “Foundations of Quantitative Thinking” course prior to enrolling in a formal analysis course.

2. Perspectives courses: Perspectives courses offer breadth and introduce students to the different ways in which various disciplines or fields define thinking, learning, and knowing. Students must successfully complete one course in each of the following six perspectives categories, with each course taken in a different academic department:

A. Aesthetic: Aesthetic perspective courses emphasize artistic expression and the perception, analysis, and evaluation of aesthetic form. These courses are designed to enhance students’ appreciation and understanding of the arts.

B. Comparative: Comparative perspective courses introduce students to comparative analysis by highlighting human diversity in politics, economics, religion, culture, class, race, gender, or ethnicity. They provide students with tools for analyzing human experience by examining similarities and differences within and across societies.

C. Historical: Historical perspective courses develop students’ capacity to understand the contemporary world in the larger framework of tradition and history. Courses focus on the problems of interpreting the past and can also deal with the relationship between past and present. All courses are broad in scope and introduce students to the ways scholars think critically about the past, present, and future.

D. Language and Culture: Language and culture perspective courses foster the study of language as an expression of culture. Students may study foreign languages, which highlight the relationship between language and culture, or English-language courses that deal with the same issue.

E. Natural Scientific: Scientific perspective courses teach the principal methods and results of the study of the natural world. Courses focus on the knowledge and theoretical bases of science. They also include laboratories or similar components to introduce students to the observation of natural phenomena and the nature of scientific study.

F. Values: Values perspective courses seek to make sense of the moral dimension of human life, as reflected in personal behavior, social policy, and institutional structure. Courses taught from the values perspective focus on the systematic analysis of ethical issues and engage students in the formulation and reasoned evaluation of moral and ethical claims.

An Academic Challenge: The First-Year Seminar

First-year Seminars are offered by a variety of academic departments. The seminars allow students to explore particular issues and subjects in depth in their first or second semester. Seminars are limited to no more than 14 students, and the faculty member teaching the seminar serves as the advisor for the students until they declare a major. The seminars encourage first-year students to engage in the kind of intense intellectual experience that other colleges often reserve for junior and senior majors. See page 12 for descriptions of specific first-year seminars.

The Major

Sometime before the end of their sophomore year, students choose a major, the area in which they will pursue a course of study in depth. Students may choose a traditional discipline or an interdisciplinary major, or, in some cases, may design a major tailored to their particular academic interests. While anchored in one area, the undergraduate major is structured to include courses in related disciplines. This ensures that breadth of knowledge is gained along with specialization. A major consists of 12 to 19 courses designated by a department or program. Majors must be declared prior to the beginning of the junior year.

Majors are offered in:

Ancient Civilization
Art (Art History, Studio Art)
Biochemistry and Molecular Biology
Biology
Business Management
Chemistry
Communication and Culture
Comparative Literature
Computer Science
Economics
English
Environmental Science and Policy
French
Geography
Government and International Relations
History

International Development and
Social Change
Mathematics
Music
Philosophy
Physics
Psychology
Screen Studies
Sociology
Spanish
Theater Arts

Interdisciplinary Majors

One of Clark's strengths is the eagerness of faculty and students to cross the traditional boundaries between academic fields. Interdisciplinary majors, special programs, and concentrations help students to see beyond the barriers of academic specialization. The interdisciplinary majors are:

Ancient Civilization
Biochemistry and Molecular Biology
Communication and Culture
Comparative Literature
Environmental Science and Policy
International Development and
Social Change

Student-Designed Majors

While most Clark students can and do fulfill their academic goals through regularly established departments and interdisciplinary programs, the University recognizes that some students may have special interests and goals that cannot be met through normal channels. The Student-Designed Major (SDM) program is designed to provide flexibility for these students while ensuring rigorous academic standards. Students are normally expected to have a G.P.A. of 3.0 or higher to pursue the SDM. Student-designed majors are coordinated by the associate dean of the college and developed with the guidance of three faculty advisors. They must be approved by the associate dean of the college by the beginning of the junior year. Guidelines for student-designed majors are available in the dean of the college office and in the academic advising center.

Minors

Minors give students an opportunity to gain depth in an academic area in addition to their major field of study. Minors are offered in:

- Ancient Civilization
- Art History
- Biochemistry and Molecular Biology
- Biology
- Chemistry
- Computer Science
- Communication and Culture
- Economics
- Education
- English
- Foreign Languages (French, German, Spanish)
- Geography
- Government
- History
- International Development
- Management
- Mathematics
- Music
- Philosophy
- Physics
- Screen Studies
- Sociology
- Theater Arts

Concentrations

Concentrations allow students to cross traditional academic disciplines to gain broad perspectives on a subject in addition to their major. Concentrations are offered in:

- Asian Studies
- Computational Science
- Environment and Society
- Ethics and Public Policy
- Holocaust and Genocide Studies
- Jewish Studies
- Law and Society
- Peace Studies
- Race and Ethnic Relations
- Urban Development and Social Change
- Women's Studies

Accelerated Degree Programs

Clark offers several programs that allow students to complete the requirements for bachelor's and master's degrees in an accelerated, five-year period. Students may obtain a master of arts (MA), master of business administration (MBA), master of public administration (MPA), a master of science in finance (MSF), or master of science in professional communication (MSPC) degree. Students are accepted into accelerated degree programs in their junior year, begin meeting requirements in their senior year, and complete those requirements in the fifth year. Bachelor's degrees are granted en route to the master's degree.

For students meeting eligibility requirements, the fifth year is tuition free. To qualify for the fifth year tuition free, a student must: be a full-time undergraduate for four years at Clark; meet bachelor's/master's course prerequisite and receive a Clark BA degree within four years; earn an overall 3.25 grade-point average during the second and third years and again in the fourth year.

Undergraduates who transfer to Clark are eligible for a 50 percent tuition fellowship during the fifth year of study. To qualify, a transfer student must: begin full-time study at Clark no later than the end of the sophomore year; earn at least a 3.25 grade-point average for courses taken at Clark; maintain a 3.25 grade-point average during the fourth year; and meet program course requirements.

The University has approved accelerated programs in biology; chemistry; communications; education; environmental science and policy; history; international development; management; and physics.

For further information and application procedures, contact the Dean of Graduate Studies at (508) 793-7760.

Preprofessional Programs

Clark University recognizes that preparation for a professional career is fully compatible with a liberal arts education. The Prelaw Program is administered through the Office of Career Services in conjunction with a faculty advisory committee. Contact Career Services for more information. Premedical or predental students are advised through a special Premedical and Predental Advisory Committee. For more information, contact Professor Edward Trachtenberg, Department of Chemistry, chair of the advisory committee.

Internships

Students are offered the opportunity to earn credit working off campus, full- or part-time, as part of their educational program. Academic credit is offered for internships that take place under the supervision of carefully selected agency sponsors in conjunction with appropriate Clark faculty. Clark participates in the Washington Semester Program with American University in Washington, D.C., and the Washington Center for Internships and Academic Seminars. Qualified students may participate in these programs and spend a semester studying and working in the nation's capital.

Office of Study Abroad Programs

Clark University is well known for its international character and is committed to encouraging a strong Clark presence abroad and an international presence on campus. The Office of Study Abroad Programs coordinates international study programs. Clark has programs in the following countries: China, the Dominican Republic, England, France, Germany, Japan, Scotland, Spain and Namibia. Clark also has affiliated programs through the School of Field Studies in Kenya, the Caribbean, Australia, Mexico, Costa Rica, and Canada.

The Leir Center in Luxembourg offers students and faculty additional opportunities for study and research abroad. A special feature of

the program is the May Term, which begins right after the end of the spring semester. Clark and Holy Cross faculty take groups of students to Luxembourg on a four-week academic program especially suited for Luxembourg and its environment.

Students who study abroad on a Clark program pay the International Program Fee (approx. tuition, room, and board). Students may earn up to a full year of credit through study abroad. Students interested in study abroad should consult the Office of Study Abroad Programs at Corner House or call (508) 793-7363 for more information.

International Students and Scholars Office

The International Students and Scholars Office (ISSO) advises international students, faculty members, scholars and their dependents on matters relating to immigration (visas, passports, travel), employment, taxes, and academic, social, financial, and personal concerns related to daily life in the U.S. and at Clark University. The ISSO serves approximately 650 international students and scholars from more than 90 countries who attend Clark during the academic year and summer sessions. Through orientation and programming, the ISSO seeks to assist with the cultural and academic adjustments of international students and scholars to better meet their educational objectives. The ISSO also works to promote cross-cultural awareness among the Clark community. Students and professors can obtain International Student/Teacher Identification cards (facilitated through the Council on International Educational Exchange) at the ISSO for use in travel or study overseas. The ISSO is a part of the Division of Student Affairs.

Army and Air Force ROTC

Clark University students may participate in Army and Air Force Reserve Officers' Training Corps at Worcester Polytechnic Institute.

U. S. citizens who are physically qualified, earn their degree from Clark University, and satisfactorily complete the ROTC program will be commissioned as second lieutenants in the U.S. Army or Air Force. Students may request an educational delay of active duty in order to attend graduate school. First-year and sophomore students can compete for two- and three-year scholarships, which are primarily based on academic performance and academic major. Students interested in Army ROTC should contact the Military Service Department at Worcester Polytechnic Institute. Students interested in Air Force ROTC should contact the Department of Aerospace Studies at WPI.

The Strassler Family Center for Holocaust and Genocide Studies

The Strassler Family Center for Holocaust and Genocide Studies provides vital national and international leadership in educating future generations of scholars. The Center, in conjunction with Clark's history department, offers the nation's first Ph.D. program specifically in Holocaust history and the study of genocide. Clark also offers an interdisciplinary undergraduate program in Holocaust and Genocide Studies, which includes courses in history, literature, psychology, government, sociology, film, and music.

Clark is the first college or university anywhere to have two occupied fully-endowed, full-time tenured professorships in Holocaust History, as well as a professorship dedicated to the study of the Armenian Genocide.

3/2 Engineering Program

The 3/2 engineering program consists of three years of studies at Clark followed by two years at an affiliated engineering school. The program leads to a bachelor of arts degree from Clark after four years and, after the fifth year, a bachelor of science in engineering from the engineering school. Clark offers 3/2 engineering programs with Columbia University, Washington University, and WPI.

Academic Advising

The Academic Advising Center helps students plan their academic programs through a coordinated set of activities and services. All new students are assigned a faculty advisor who helps them select courses and programs. Once a student has chosen a major, academic advising is coordinated by faculty within the student's major department.

Among the Academic Advising Center's support services are:

- **The Writing Center:** Recognizing the importance of writing in all fields, Clark offers cross-disciplinary, departmental, and special Writing Center programs. Supplementing the curriculum, Clark's Writing Center provides individual tutoring and noncredit workshops for all interested students. Writing Center offerings are flexibly designed to help students at all levels achieve clear, correct, graceful writing.
- **Special Needs Services:** These services are designed to foster functional independence for students with special learning needs. Students with documented disabilities may enroll in these services. The coordinator of disability services offers advising and academic assistance and helps students negotiate reasonable accommodations. An early orientation for eligible first-year students is also part of these services.

Other Academic Support Services

- **Language Arts Resource Center:** The Center provides video and audio tapes as well as access to satellite broadcasts of international news and programs to assist students learning a foreign language. The center is located on the fourth floor of Goddard Library.
- **Goddard Library Public Services—Reference Desk:** Students working on research projects may receive assistance at the reference desk on the use of the extensive research resources of Clark University libraries as well as the Colleges of Worcester Consortium library system.

American Language and Culture Institute (ALCI)

Clark University's American Language and Culture Institute, known to students around the world as "ALCI," offers intensive ESL programs for students who want to improve their English language skills for academic or professional reasons. Through experiential learning, students receive a thorough orientation into American culture. ALCI serves as a resource for international undergraduates, graduate and Worcester-area community students for whom English is a second language, providing for further opportunities in the training of speaking the English language, orientation to American life and culture, and preparation for successful university study.

Instruction is offered at up to five levels of proficiency, beginning through academic preparation. Dedicated, trained professionals provide 20 or more hours per week of intensive ESL instruction as well as private tutorial sessions. Students are entitled to many services offered by the University including the Goddard Library, computer laboratories, athletic facilities, social activities, campus lectures and day trips to local and regional places of interest.

Colleges of Worcester Consortium

Clark is a member of the Colleges of Worcester Consortium, which means that Clark sophomores, juniors, and seniors can enroll for one course a semester at Anna Maria College, Assumption College, the College of the Holy Cross, Worcester Polytechnic Institute, Worcester State College, the University of Massachusetts Medical School, Tufts University Veterinary School, Becker College, or Quinsigamond Community College.

Consortium Gerontology Studies Program

The Worcester Gerontology Studies Program is offered through the Colleges of Worcester

Consortium. Courses related to aging are available at various consortium colleges, reflecting the multidisciplinary nature of gerontology. This program provides courses and internships in a coordinated curriculum leading to a Certificate in Gerontology. Career planning for participating students is organized through the Consortium Office in coordination with on-campus career services.

For further information about the Gerontology Studies Program, contact David Stevens, Clark Department of Psychology, the program advisor or the Consortium Program Office at 508-754-6829.

First-Year Seminars

(Offered in 2002-2003)

BIOL 040 BRAIN AND ENVIRONMENT

This seminar is a laboratory-focused course on how we use specialized systems in our brains to find out about our environment. The class as a group will conduct original research on an unsolved problem in human sensory physiology: how we detect and identify a food substance as "sweet." We will review the known anatomy and physiology of the brain system for taste and discuss how systems for seeing, hearing, smelling, and touching are similar. Then we will consider recent research on the problem of sweet taste, work out the details of our experimental design, test a group of human subjects, and analyze and interpret the data. Each student will write a final paper reporting the research in the style of a scientific journal article. Enrollment is limited to 12 students. A high school chemistry background is recommended. Fulfills the science perspective. Ms. Kennedy

CHEM 101.2 "WHY DOES IT DO THAT?"

Hands on demonstrations and laboratory exercises, together with a detailed analysis of key experiments in the historical development of our understanding of chemistry, will be used to introduce topics normally covered in introduc-

tory chemistry lectures. “Practical” applications—such as the preparation of contact explosives and pyrophoric materials—will be used to illustrate chemical principles, including measurements, atomic and molecular theory, moles, aqueous reactions, electronic configuration, bonding, thermochemistry, behavior of gases, and intermolecular forces. Students will discover chemistry by doing chemistry.

Students will engage in experiments that answer such questions as: How do we know that atoms contain electrons and protons? How many atoms are in a mole? How can we tell if water contains heavy metals? How can we measure the pressure of butane gas in a cigarette lighter? And why do balloons filled with hydrogen explode? Lecture and laboratory. Exams, laboratory reports, and class presentations. Fulfills the science perspective. Mr. Turnbull.

CMLT 150 JOURNEYS WITH HYPHENATED AMERICANS: EMERGING IDENTITIES; EVOLVING CULTURES

The American “melting pot,” once a national myth, has now become a cultural cliché often derided by contemporary ethnic communities. Forged largely around the migration of Europeans to the United States in the early 20th century, that fiction of national identity has since been rewritten and transformed through works that reflect the experiences of men and women who have come from non-European backgrounds: Native Americans, African Americans, Latinos, and Asian Americans. This seminar traces some of the shifts in these stories of migration in both fiction and film, in works ranging from the uplifting autobiographies of European immigrants at the beginning of the 20th century to Robert Rodriguez’s irreverent Chicano movie, “Spy Kids,” at the century’s end. In debunking the melting pot, writers and filmmakers have produced a highly imaginative and yet subversive countermythology that forces us to reconsider

many of the commonplaces about American cultural identity. Fulfills the verbal expressions requirement. Mr. D’Lugo

CMLT 152: LYRIC POETRY: SONGS OF THE SELF

Through a study of selected lyrical works, drawn from many different centuries and a variety of cultures, this seminar investigates the deepest roots of human self-expression, the power of metaphor, and the beauty of image-making in words. Texts are taken from the 20th-century Anglo-American tradition (Moore, Auden, Eliot, Roethke, Levertov); or from certain older English-language contexts (Wyatt, Smart, Coleridge); as far as possible, texts from non-English speaking cultures are presented both in literary translation and in the original to give the English-speaking student insight into the cadences of the other language. Students with knowledge of a foreign language are encouraged to do comparative work in that language and in English.

Students write several critical essays over the semester on class readings and individually-assigned projects. Fulfills the verbal expression requirement. First preference for enrollment will be given to students in the International Studies Stream. Others will be admitted on a space available basis. Mr. Ferguson

ECON 100 ECONOMICS OF ENVIRONMENTAL REGULATION

Can we rely on “the market” to solve environmental problems, or is government intervention needed? How can we measure the benefits and costs arising from environmental regulation? Why do different countries have very different methods of environmental regulation? Learn about how economists analyze these issues, while also learning basic economics. The course will consider a variety of environmental issues, from air and water pollution to endangered species and global warming. Fulfills the comparative perspective. Mr. Gray

EDUC 105 NATURE AND BASIS OF MORALITY

This seminar will examine a variety of meanings for, and influences on, morality. Influences considered will include the family, schools, religion, peers, and the individual him/herself. In addition to intensive consideration of a diverse set of primary source readings in both behavioral sciences and in religious writings (the latter to a lesser extent), students will analyze answers to questionnaires they and previous classes have collected on the subject, and they will use those analyses in a systemic way to test their own and others' hypotheses. Past experience with the course suggests strongly, albeit somewhat unsystematically, that tolerance and appreciation by the students of both complexity and even ambiguity helps to foster a better educational experience for both students and faculty. Fulfills the values perspective. Mr. Zern

EDUC 112/COMM 020 TRANSFORMATION SCHOOLING: DOCUMENTARY VIDEO FOR SOCIAL CHANGE

This is a field-based and inquiry-oriented seminar, an apprenticeship in documentary filmmaking as well as in school and community research and advocacy for social change. The course involves instruction in the basics of video production (using state of the art digital cameras) and seminar members partner with new and experienced teachers in inner-city public schools. We work with them as video assistants and also develop our own films about the challenges and possibilities of urban school reform. In addition to "hands-on" activity, there is serious attention to reading in the field of ethnographic research, education reform, and community institutions that support youth development. Moreover, seminar members get involved in grass-roots organizing and soliciting input from the community, as well as ongoing critique of their planning documents, their filmed footage, and their written companion texts. We thus integrate fieldwork with

theory and reflective critique. A final project for this seminar will be completed in the spring semester. Fulfills the values perspective and is recommended for all Communication and Culture majors. Ms. Michaels

ENG 109 THE ANATOMY OF POETRY

Many animal species communicate and therefore have languages, whether of sounds, or gestures, or both. But only humans are able to control language; for example, only a human can hear or read something never said or written before, and understand it. Literature is art made by relying on this human quality; and poetry is the genre of literature most constituted of particular words. "The Anatomy of Poetry" is a seminar devoted to the intensive study of it. The class will read and discuss poems in English from the Middle Ages to our own age, by poets of different nationalities, genders and races. This seminar satisfies the poetry requirement for the English major and fulfills the verbal expression requirement. You must have been placed at the verbal expression level to select this seminar. Mr. Sultan

ENG 113 THE LITERATURE OF BASEBALL

Baseball has often been cited as "America's game," in the sense that it is thoroughly interwoven into the history of American culture. Many writers, particularly in the 20th century, have seen in the game fertile ground for describing their interpretations of the American experience. It is a game which offers tremendous variety within rigidly set boundaries. In short, baseball is a metaphor to which Americans return over and over to express their sense of identity. It is this general theme that this course will explore: why is baseball so attractive to American writers of all types, and how do they use the game and its players as the basis for suggesting who we are? Fulfills the verbal expression requirement. You must have been placed at the verbal expression level to select this seminar. Mr. Elliott

GEOG 187 THE IMAGE OF THE WORLD: THE HISTORY OF MAPS AND MAP MAKING

An introduction to the history of cartography centered around the idea of the map as the “mirror of culture.” That is, how cartography, while being set against a geographical background, has always been deeply connected to historical events, trends in intellectual thought, changes in society, and advances in technology. The course will range worldwide, cover a time-period from earliest times to the present, deal with the products of explorers, surveyors, mariners, philosophers, scientists, writers, politicians, and others. Use will be made of the holdings in the University Map Library and the Rare Book Room, and may also involve outside field trips. Offered in the Spring 2003 semester. Fulfills the historical perspective. First preference will be given to students in the International Studies Stream. Others will be admitted on a space-available basis. Mr. Steward

GOVT 102 THE GENDER GAP IN AMERICAN POLITICS

Since the early 1980s, the “Gender Gap” has received a good deal of attention from the media, politicians, and scholars. Differences between women and men in the general public have been found in voter turn-out, candidate, and party preferences, as well as in attitudes on a number of important domestic and foreign policy issues. On the other hand, women and men, overall, hold remarkably similar opinions on some political issues. A major focus of our course will be on comparing the political attitudes and behavior of women and men and understanding the factors that result in gender differences and similarities in politics, for example, differences in political and gender role socialization, education, employment, etc. We will also consider how different sub-groups of men and women compare to each other and to political patterns for their genders. The biggest gender gap in American politics continues to be at the elite level, where men still

greatly outnumber women in running for and securing elective political offices. Another major focus of our course will be on explaining the reasons for this difference. We will consider the characteristics, backgrounds, and motivations of people—men and women—who run for local, state, and national elective offices, and the factors that affect their electoral success or failure, including party support, campaign funding, and media coverage. Finally, we will examine whether there are any important differences in the policy preferences, issue priorities, representational styles, and impact of female and male elected officials. Fulfills the comparative perspective. Ms. Krefetz

HIST 021 VOICES FROM SLAVERY

Students in this seminar will explore the nature and dynamic of American slavery, largely from first-hand accounts of those who experienced and observed the slave regime of the American South in the 19th century. Studied intensively in the last 30 years, slavery is still a hotly contested topic in American history. This course is designed to introduce students to the historical controversies concerning slavery; to expose students to the primary sources that historians use to understand slavery and the slave regime; and to have students work as historians to draw their own conclusions about slavery, as they weigh and assess evidence and documentation. Fulfills the values perspective. Ms. Greenwood

HIST 062 WAR AND PEACE IN THE MIDDLE EAST

Explores the cycle of war and peace in the Middle East during the past 100 years in order to answer three questions: What role has ethnic identity played in prolonging violent conflict in the region, not merely between Arabs and Israelis, but also between Shiite and Sunni Muslims? Have the United States, the Soviet Union, and the other great powers served more as peacemakers or troublemakers in the Middle East? To what degree is the contemporary confrontation between America and radical Islam

“a clash of civilizations?” Case studies will range from the birth of Israel to the September 11th attacks and their aftermath. Students will write a series of brief essays based on historical and literary documents ranging from the Balfour Declaration to Osama bin Laden’s fatwa against the United States. Fulfills historical perspective. First preference for enrollment will be given to students in the International Studies Stream. Others will be admitted on a space available basis. Mr. Little

PHIL 025/ARTS 025 EROS AND THANATOS

An interdisciplinary seminar in philosophy and visual arts with an environmental emphasis. The fundamental concepts in the title are from classical Greek. In that language, “eros” names “love” especially understood as a power of attraction or joining, and “thanatos” names “death” especially as the disintegration of complex structures and the loss of individual existence. Greek myths personified both figures. Eros was the winged son of Aphrodite whose arrows aroused passion in those struck by them. Thanatos was death, the brother of sleep. In their mutual interweaving, these two words name a fundamental dynamic that constitutes life’s fabric. Although the words originate with the Greeks, the realities included within the concepts of “eros” and “thanatos” arise in many cultures. Human cultures have mapped and embodied these ideas in rich and interesting ways. One might say that they are universal human preoccupations. We will look at how these two concepts appear in a variety of cultures—both ancient and contemporary—as stories, patterns, and energies. How have peo-

ples represented love and death? Beyond that, how do the energies of “eros” and “thanatos” show up in the non-human world around us? Each week the seminar will focus on a particular theme, combining readings, visual experiences, and other activities to investigate the ways these two fundamental ideas manifest themselves. The weekly themes will include mappings of eros, eros in nature, creativity, eros and relating, counterfeits of eros, death and authenticity, and the cycles of birth and death. Fulfills the comparative perspective. Ms. Buie, Mr. Wright

PHIL 104 THE AIDS PANDEMIC

The Human Immunodeficiency Virus (HIV) and the Acquired Immune Deficiency Syndrome (AIDS) present American society with a public health challenge of unprecedented dimensions—a challenge which will test not only our scientific and medical establishments, but our commitment to social justice, professional fidelity, and interpersonal solidarity. This seminar will draw on the rich philosophical, biological, epidemiological, legal, medical, and sociological literatures in order to examine a number of the moral and public policy issues which have been raised by the HIV epidemic. Particular attention is given to the issues raised by the international nature of the pandemic. First preference for enrollment will be given to students in the International Studies Stream. Others will be admitted on a space available basis. Fulfills the verbal expression requirement. You must have been placed at the verbal expression level to select this seminar. Mr. Derr

PHIL 108 PRIVACY PROTECTION IN LAW AND ETHICS

In this seminar, we will first survey the history of privacy protection as it has evolved in American tort law and constitution law. We will then analyze alternative philosophical characterizations of privacy and its scope, focusing on information, autonomy, property, and intimacy. We will assess varied reasons for valuing privacy and then consider contrasting versions of the feminist critique of privacy as a tool for shielding abuse. Throughout the course we will study landmark legal cases invoking privacy from the early 1900's to the present, with an eye toward understanding the scope and limits of privacy protection. We will consider numerous applications of privacy to public policy issues including the legislation of morals, drug testing, information technologies, and how to balance privacy and public safety. Fulfills the values perspective. Ms. DeCew

PHIL 109 PERSONS, ROBOTS, AND THE APOCALYPSE

How should we understand the place of a human being in a world such as ours? The modern world is distinctive. It is distinctive in part because of the scientific advances we have made and because of the political strife of the last century. This world impacts our understanding of the nature and value of ourselves. In this seminar, we'll examine various "modern" visions of human beings. We'll read accounts of the Nazi holocaust. We'll explore both literature and film suggesting that people are merely machines. And, we'll explore different reactions to this "modern" vision of

humans, including the idea that the world, as we know it, is coming to an end. Fulfills the verbal expression requirement. You must have been placed at the verbal expression level to select this seminar. Mr. Hendricks

SOC 036 RACE AND ETHNICITY ACROSS BORDERS: COMPARING THE LOCAL AND GLOBAL

Using a comparative framework, this seminar will examine the concepts of race and ethnicity in local, national and global locations. Particular emphasis will be on race and ethnicity in changing cultural and political contexts in an ever changing globally connected world. For example, how have the events of September 11th in New York determined and constructed racial and ethnic identities? What are social, cultural and political dynamics that shape racial identities and ethnic stereotypes? Why do derogatory racial labels get attached to people? How do ethnic groups get defined in volatile contexts? Students will read autobiographies and biographies to explore how formative racial and ethnic experiences have shaped their own lives and identities and those of others who have documented their lives in books and on film. What can we learn from these racial and ethnic imaginations that can help us theorize race and ethnicity across borders through sophisticated and sensitive theoretical frameworks. Fulfills the comparative perspective. First preference will be given to students in the International Studies Stream. Others will be admitted on a space available basis. Ms. Bhachu



International Studies Stream



The International Studies Stream (ISS) is an innovative option within Clark's Program of Liberal Studies that offers students the opportunity to structure their broad liberal arts education by focusing on international themes and issues.

To succeed in contemporary society, students must be familiar with the ways common problems—such as economic growth, immigration, social welfare, environmental regulation—are dealt with differently across the globe. They need to understand the historical, social, and political foundations for these differences, and they need to be able to assess their own societies within an international context.

The ISS helps students understand the implications of global integration for cultural identity, economic growth, peace, security, and development. Language and cultural studies provide the skills necessary for effective participation in the global economy.

The ISS infuses students' educational experiences with an international perspective. Through courses, guest speakers, internships, and study abroad opportunities, the Stream provides the broad-based international experience students will need in our increasingly global society.

A flexible curriculum

The foundation of the ISS is a set of courses with an international focus and enhanced language training designed to place the experience of the United States and other countries in global context.

The curriculum incorporates the best elements of undergraduate teaching: team-taught interdisciplinary courses; small classes taught in seminar format; genuine language proficiency, developed in part through study outside the U.S.; extension of academic activities beyond

the classroom through field trips, speakers programs, and other informal activities; and careful mentoring of students.

The ISS recognizes that success in most careers now requires international perspective and language skills. The ISS curriculum can be combined with any major, and is flexible enough to address the educational needs of aspiring bankers, journalists, attorneys, physicians, grassroots organizers, and many others.

International Studies Stream Requirements

Students in any major may participate in the International Studies Stream. The program is intended to provide focus for a student's studies rather than to impose many additional requirements. The Stream includes a broad range of courses and extracurricular activities from which students can select to create an appropriate, challenging program of study. Successful completion of the Stream will be designated on students' transcripts.

Requirements for the Stream are:

- **The core course: IDND 066 Global Society**—The globalization of cultural, economic, and political life is one of the defining modernist themes of the 20th century. The signs of international interdependence are everywhere, from the rise of Japanese automobile factories in the heartland of the United States to the success of Hollywood movies in eastern Europe and beyond. And yet in the midst of the apparent triumph of globalization, diverse examples of fragmentation and local action and initiative also capture our attention. The great international institutions of the 20th century—the United Nations, the World Bank, and the new World Trade Organization—are also challenged by ethnic nationalism, economic protectionism, and growing introspection on the part of many countries. This course provides a widely ranging introduction to these twin themes of global and local action, and serves as the foundation for study within the International Studies Stream at Clark

University. Fulfills the Values Perspective Requirement. Staff/Offered every year

- **A First-year Seminar with an international focus**—ISS students choose from several First-year Seminars during their first semester at Clark. (Students who apply for admission to the ISS after they matriculate at Clark may receive permission to take the first-year seminar in their sophomore year.) These courses include no more than 15 students and allow participants to focus on an academic area in depth. The course instructor serves as the academic advisor for all students in the course. See course descriptions at the end of this section for a sample of ISS First-year Seminars.
- **Program of Liberal Studies (PLS) requirements**—All Clark undergraduates are required to complete eight PLS courses: a verbal expression course, a formal analysis course, and six perspectives courses. Students in the International Studies Stream automatically satisfy at least four of the eight PLS requirements by taking internationally focused courses in the aesthetic perspective, comparative perspective, historical perspective, language and culture perspective, and values perspective. Students may fulfill the verbal expression requirement in or out of the Stream; the formal analysis and scientific perspective requirements are not part of the Stream. See the perspectives course listings at the end of this section.
- **Expanded foreign language proficiency**—Beyond the PLS Language and Culture Perspective requirement, ISS students complete two additional semesters of language study or demonstrate competence equivalent to two years of language study at the college level. Clark offers courses in French, Spanish, German, Russian, Japanese, Chinese, and Hebrew. Proficiency tests for other languages can be arranged.
- **Study abroad experience**—U.S. students in the ISS complete at least one unit of study outside the United States. They may partici-

pate in a semester or year-long study abroad program; a May Term or Summer course, or an internship. Financial aid for some study abroad programs is available for qualified students. Study abroad sites include Zimbabwe, Great Britain, China, France, Germany, Japan, Luxembourg, Spain, Kenya, the Caribbean, Australia, Mexico, Costa Rica, Palau, and Canada. International students, whose study abroad experience is at Clark, complete an internship with an international agency in the U.S., or a research project focused on an international issue.

Courses

IDND 066

See course description above. Fulfills the historical perspective requirement.

CMLT 152 LYRIC POETRY: SONGS OF THE SELF

Through a study of selected lyrical works, drawn from many different centuries and a variety of cultures, this seminar investigates the deepest roots of human self-expression, the power of metaphor, and the beauty of image-making in words. Texts are taken from the twentieth-century Anglo-American tradition (Moore, Auden, Eliot, Roethke, Levitt); or from certain older English-language contexts (Wyatt, Smart, Coleridge); as far as possible, texts from non-English speaking cultures are presented both in literary translation and in the original to give the English-speaking student insight into the cadences of the other language. Students with knowledge of a foreign language are encouraged to do comparative work in that language and in English. Students write several critical essays over the semester on class-readings and individually-assigned projects. Fulfills the verbal expression requirement. Mr. Ferguson

PHIL 104 THE AIDS PANDEMIC

The Human Immunodeficiency Virus (HIV) and the Acquired Immune Deficiency Syndrome (AIDS) present American society with a public health challenge of unprecedented dimensions — a challenge which will test

not only our scientific and medical establishments, but our commitment to social justice, professional fidelity, and interpersonal solidarity. This seminar will draw on the rich philosophical, biological, epidemiological, legal, medical, and sociological literatures in order to examine a number of the moral and public policy issues which have been raised by the HIV epidemic. Particular attention is given to the issues raised by the international nature of the pandemic. First preference for enrollment will be given to students in the International Studies Stream. Others will be admitted on a space available basis. Fulfills the verbal expression requirement. You must have been placed at the verbal expression level to select this seminar. Mr. Derr

GEOG 187 THE IMAGE OF THE WORLD: THE HISTORY OF MAPS AND MAP MAKING

An Introduction to the History of Cartography centered around the idea of the map as the “mirror of culture”. That is, how cartography, while being set against a geographical background, has always been deeply connected to historical events, trends in intellectual thought, changes in society, and advances in technology. The course will range worldwide, cover a time-period from earliest times to the present, deal with the products of explorers, surveyors, mariners, philosophers, scientists, writers, politicians, and others. Use will be made of the holdings in the University Map Library and the Rare Book Room, and may also involve outside field trips. Offered in the Spring 2003 semester. Fulfills the historical perspective. Mr. Steward

HIST 062 WAR AND PEACE IN THE MIDDLE EAST

This course explores the cycle of war and peace in the Middle East during the past 100 years in order to answer three questions: What role has ethnic identity played in prolonging violent conflict in the region, not merely between Arabs and Israelis, but also between Shiite and Sunni Muslims? Have the United States, the Soviet Union, and the other great powers served more as peacemakers or troublemakers in the Middle East? To what degree is the con-

temporary confrontation between America and radical Islam “a clash of civilizations”? Case studies will range from the birth of Israel to the September 11th attacks and their aftermath. Students will write a series of brief essays based on historical and literary documents ranging from the Balfour Declaration to Osama bin Laden’s fatwa against the United States. Fulfills historical perspective requirement. Mr. Little

SOC 036 RACE AND ETHNICITY ACROSS BORDERS: COMPARING THE LOCAL AND GLOBAL

Using a comparative framework, this seminar will examine the concepts of race and ethnicity in local, national and global locations. Particular emphasis will be on race and ethnicity in changing cultural and political contexts in an ever changing globally connected world. For example, how have the events of September 11th in New York determined and constructed racial and ethnic identities? What are social, cultural and political dynamics that shape racial identities and ethnic stereotypes? Why do derogatory racial labels get attached to people? How do ethnic groups get defined in volatile contexts? Students will read autobiographies and biographies to explore how formative racial and ethnic experiences have shaped their own lives and identities and those of others who have documented their lives in books and on film. What can we learn from these racial and ethnic imaginations that can help us theorize race and ethnicity across borders through sophisticated and sensitive theoretical frameworks. Fulfills the comparative perspective requirement. Ms. Bhachu

ISS Perspectives Courses

The following courses are approved for credit in the International Studies Stream. See department listings for course descriptions.

Aesthetic Perspective

ARTH 010 STONE AGE TO OUR AGE: MONUMENTS AND MASTERPIECES OF WESTERN ART

Mr. Townsend, Mr. Bailey, Ms. Grad/Offered every semester

ARTH 155 ART OF AFRICA, OCEANIA, AND NATIVE AMERICA

Ms. Borgatti/Offered every year

ARTH 156 ART OF BLACK AFRICA

Ms. Borgatti/Offered every year

ARTH 160 ARTS OF ASIA

Mr. Bailey/Offered every other year

ARTH 161 ARTS OF ISLAM

Mr. Bailey/Offered every other year

CMLT/SCRN 121 SURVEY OF INTERNATIONAL FILM MOVEMENTS

Mr. D’Lugo/Offered every other year

SPAN/CMLT/SCRN 246 STUDIES IN SPANISH CINEMA

Ms. Butzel/Offered every other year

SCRN 101 INTRODUCTION TO SCREEN STUDIES

Ms. Butzel/Offered every semester

SCRN/SPAN 248 INTRODUCTION TO CINEMA IN LATIN AMERICA

Mr. D’Lugo/Offered every other year

SCRN/FREN 263 HISTORY OF FRENCH CINEMA

Ms. Butzel/Offered every other year

Comparative Perspective

CIGP 161 CULTURAL IDENTITIES AND GLOBAL PROCESSES

Ms. Bhachu/Offered every year

CMLT 130 THE NATIONAL IMAGINATION

Staff/Offered every year

ECON 010 ECONOMICS: A COMPARATIVE APPROACH

Staff/Offered every semester

ECON 100 THE GLOBAL ECONOMY

Mr. Bernhofen/Offered periodically

ECON 177 CHINESE AND JAPANESE ECONOMIES

Mr. Hsu/Offered every other year

FREN/ID 158 THE FRENCH-SPEAKING WORLD

Ms. Kaufmann/Offered every other year

GEOG 016 INTRODUCTION TO INTERNATIONAL ECONOMIES

Mr. Peet/Offered every year

GEOG 030 IMMIGRANTS AND THE CITY: THE WORLD COMES TO WORCESTER

Ms. Hanson/Offered periodically

GEOG/ID 127 POLITICAL ECONOMY OF UNDERDEVELOPMENT

Mr. Peet/Offered every year

GEOG 152 GEOGRAPHY OF GLOBALIZATION

Ms. Aoyama/Offered Periodically

GEOG 170 DIVIDED CITIES, CONNECTED LIVES

Ms. Hanson/Offered every other year

GEOG 179/ID 174 INTERNATIONAL POLITICAL ECOLOGY

Ms. Rocheleau/Offered every other year

GOVT 070 INTRODUCTION TO COMPARATIVE POLITICS

Ms. Enloe/Offered every year

GOVT 208 COMPARATIVE POLITICS OF WOMEN

Ms. Enloe/Offered every other year

HIST 124 ETHNICITY AND NATIONALISM IN MODERN EUROPE

Mr. Borg/Offered every year

HIST 251 COMPARATIVE STUDY OF REVOLUTIONS: THE FRENCH REVOLUTION OF 1789 AND THE BEGINNINGS OF MODERN REVOLUTIONS

Mr. Lucas/Offered every other year

ID/PSTD/HIST 050 LOCAL ACTION GLOBAL CHANGE

Mr. Ford, Ms. Thomas-Slayter/Offered every year

ID 170 ECOLOGY AND ECONOMY IN THE TROPICS

Staff/Offered every year

ID 120 INTRODUCTION TO SOCIAL ANTHROPOLOGY

Staff/Offered regularly

ID/GEOG/GOVT/PSTD 125 DEVELOPMENT PROBLEMS

Ms. Thomas-Slayter/Offered every year

ID 212 WOMEN AND SOCIAL CHANGE

Ms. Thomas-Slayter/Offered every other year

PSTD 120 INTERNATIONAL CONFLICT MANAGEMENT

Mr. DeRivera/Offered periodically

SOC 100 INTRODUCTION TO SOCIOLOGY

Staff/Offered every semester

SOC 256 CLASS, STATUS, AND POWER

Ms. Tenenbaum, Mr. Ross/Offered every semester

Historical Perspective

HIST/GOVT/ID 103 AFRICA AND THE WORLD

Ms. Grier/Offered every year

HIST 062 WAR AND PEACE IN THE MIDDLE EAST

Mr. Little/Offered periodically

HIST 070/071 OUR EUROPEAN ROOTS

Mr. Lucas/Offered every year

HIST 080 INTRODUCTION TO MODERN ASIA

Mr. Ropp/Offered every other year

HIST 084 JAPANESE CIVILIZATION

Staff/Offered periodically

HIST 177 LATIN AMERICA 1825

Staff/Offered periodically

HIST/AS 181 CHINESE CIVILIZATION

Mr. Ropp/Offered every other year

HIST 182 MODERN CHINA: 1880 TO THE PRESENT

Mr. Ropp/Offered every other year

HIST 184 MODERN JAPAN

Staff/Offered every other year

HIST 255 GLOBAL RELATIONS: 20TH CENTURY

Mr. Richardson/Offered periodically

Language and Culture Perspective

CHIN 101/102 INTRODUCTORY CHINESE

Staff/Offered every year

COMM/FREN 136 STUDIES IN FRENCH CULTURE: IDENTITIES AND DIFFERENCE

Ms. Kaufmann/Offered every year

FREN 101/102 ELEMENTARY FRENCH I, II

Mr. Spingler/Offered every year

FREN 103 ELEMENTARY FRENCH INTENSIVE

Staff/Offered every year

FREN 105/106 INTERMEDIATE FRENCH I, II

Mr. Spingler/Offered every semester

FREN 120 WAYS OF WRITING, WAYS OF SPEAKING

Ms. Kaufmann/Offered every year

GERM 101/102 INTRODUCTORY GERMAN

Mr. Kaiser/Offered every year

GERM 103/104 INTERMEDIATE GERMAN I, II

Mr. Hughes/Offered every year

GERM 131 SPOKEN AND WRITTEN GERMAN

Mr. Kaiser/Offered every year

GERM 134 WORKSHOP IN TRANSLATION

Mr. Hughes/Offered every year

GERM 140 MODERN GERMAN PROSE

Mr. Hughes/Offered every other year

GERM 156 THE MODERN GERMAN SHORT STORY

Mr. Hughes/Offered every other year

GREEK 101/102 INTRODUCTORY GREEK

Mr. Burke/Offered every year

HEBR 101/102 ELEMENTARY HEBREW I, II

Ms. Barone/Offered every year

HEBR 103/104 INTERMEDIATE HEBREW I, II

Ms. Barone/Offered every year

HEBR 105 ADVANCED HEBREW

Ms. Barone/Offered periodically

HEBR 199 ADVANCED TOPICS

Ms. Barone/Offered periodically

JAPN 101/102 ELEMENTARY JAPANESE I, II

Ms. Aoki/Offered every year

JAPN 103/104 INTERMEDIATE JAPANESE I, II

Ms. Aoki/Offered every year

JAPN 105 ADVANCED JAPANESE

Ms. Aoki/Offered every year

LATIN 101/102 INTRODUCTORY LATIN

Ms. Sun/Offered every year

RUSS 101/102 INTRODUCTORY RUSSIAN

Ms. Macaulay/Offered every year

RUSS 103/104 INTERMEDIATE RUSSIAN

Ms. Macaulay/Offered periodically

RUSS 299 ADVANCED TOPICS—RUSSIAN LITERATURE AND GRAMMAR

Ms. Macaulay/Offered periodically

SPAN 101/102 ELEMENTARY SPANISH

Staff/Offered every semester

SPAN 103 ELEMENTARY SPANISH INTENSIVE

Staff/Offered every semester

SPAN 105/106 INTERMEDIATE SPANISH

Staff/Offered every semester

SPAN 127 PRACTICE IN ORAL AND WRITTEN SPANISH

Staff/Offered every semester

SPAN 131 READINGS IN HISPANIC LITERATURES

Staff/Offered every year

Values Perspective

IDND 066 GLOBAL SOCIETY

Staff/Offered regularly

HIST 272 19TH- AND EARLY 20TH-CENTURY EUROPEAN VALUES (CIRCA 1800–1930)

Mr. Lucus/Offered every other year

HIST 033 CONFUCIANISM, BUDDHISM: CULTURAL HERITAGE OF EAST ASIA

Mr. Ropp/Offered periodically

ID/GOVT 232 SOCIAL JUSTICE, HUMAN RIGHTS, AND DEVELOPMENT

Staff/Offered periodically

PHIL 105 PERSONAL VALUES

Staff/Offered every semester

PHIL 107 AIDS: ETHICS AND PUBLIC POLICY

Mr. Derr/Offered periodically

PHIL/PSTD 130 MEDICAL ETHICS

Mr. Derr/Offered every semester

PHIL 132 SOCIAL AND POLITICAL ETHICS

Ms. DeCew/Offered every semester

PHIL 150 PHILOSOPHY OF RELIGION

Mr. Wright/Offered periodically

PHIL 221 SOCIAL AND POLITICAL PHILOSOPHY

Ms. DeCew/Offered every other year

PSTD 170 INTRODUCTION TO PEACE STUDIES

Mr. DeRivera/Offered every year

SOC 204 THE HOLOCAUST: A STUDY OF GENOCIDE

Ms. Tenenbaum/Offered every year

SPAN 152 HISPANIC LITERATURE OF POLITICAL COMMITMENT

Mr. Ferguson/Offered periodically

Verbal Expression

CMLT 125 CROSSING BOUNDARIES

Ms. Kaufmann/Offered periodically

GERM/CMLT 188 THE CULTURE OF THE WEIMAR REPUBLIC

Mr. Schatzberg/Offered periodically

HIST 032 AFRICA'S 21ST CENTURY: THREE ALTERNATIVE MODELS

Mr. Ford/Offered regularly

Participating Faculty

David P. Angel, Ph.D., *geography: urban/ economic geography, social theory*

Michiko Aoki, Ph.D., *Japanese language and culture*

Yuko Aoyama, Ph.D., *economic geography, regional planning*

Michael Bamberg, Ph.D., *psychology: first and second language acquisition, narratives, discourse analysis, cross-linguistic/cross-cultural comparison*

Daniel Bernhofen, Ph.D., *economics: international economics*

Parminder Bhachu, Ph.D., *Henry R. Luce Professor of Cultural Identity and Global Processes: construction of identities and ethnicities, immigration diasporas, women and wage labor markets, nationalist churches and global processes*

Joseph DeRivera, Ph.D., *psychology: the structure and function of different emotions, the relationships between emotion and action, the social psychology of peace and justice*

Carol D'Lugo, Ph.D., *foreign languages and literatures: Spanish and Spanish American narrative, literary theory*

Marvin D'Lugo, Ph.D., *foreign languages and literatures and screen studies: Hispanic literature and film, narrative theory*

Cynthia Enloe, Ph.D., *government and international relations: women and politics, militarization, Asian politics, British politics, ethnic and racial politics*

William Ferguson, Ph.D., *foreign languages and literatures: Spanish Golden Age literature, 20th-century Hispanic literature*

Richard Ford, Ph.D., *history and international development: African history, international development*

Beverly Grier, Ph.D., *government and international relations: African politics, international development, women's studies, U.S. black politics*

Robert Hsu, Ph.D., *economics: economic development, comparative economic systems, international economics*

Dorothy Kaufmann, Ph.D., *foreign languages and literatures: French literature, feminism and women writers, autobiography, French and Francophone cultural studies*

Douglas Little, Ph.D., *history: U.S. diplomatic history, U.S. 20th-century history*

Bruce London, Ph.D., *sociology: technology and society, community, sociology of the Third World, social demography*

Richard Peet, Ph.D., *geography: political economy of development, social theory, geography of consciousness*

Dianne Rocheleau, Ph.D., *geography: cultural/political/systems ecology, gender, forestry and agriculture, environment/development*

Paul Ropp, Ph.D., *history: Chinese, social, and intellectual history*

Robert Ross, Ph.D., *ISS director, sociology: urban studies, political sociology, political economy, social policy*

Walter Schatzberg, Ph.D., *foreign languages and literatures and comparative literature: age of Goethe, German expressionism in literature and the arts, German cinema, relations between literature and science*

Valerie Sperling, Ph.D., *Post-Soviet and East European politics, comparative politics, social movement and collective action, women's studies*

Barbara Thomas-Slayter, Ph.D., *international development and social change: local institutions and organizations, women and public policy, peasant-state relations, gender issues*

Maurice Weinrobe, Ph.D., *economics: monetary economics, economics of population*

Note: In addition to the above faculty, who teach regularly in the program, other faculty members from a number of departments are active participants in the International Studies Stream, have research interests in this area, and offer courses that include a significant international component.

For more information about the International Studies Stream, contact

Bob Ross, Director of the ISS,

Clark University, 950 Main Street,

Jefferson Academic Center, Room 405,

Worcester, MA 01610.

508-793-7181.

Webpage: www.clarku.edu/ISS



Tuition and Financial Aid



Summary of Tuition & Other Charges for First and Second Semester of Academic 2001-2002

Tuition \$25,600

Room:

Single room	4,600
Singles within suites	4,900
Double room	3,000
Double within suites	3,350
Triple room	3,000
Board (Compulsory for 1st- & 2nd-year students)	1,950
Student Activity Fee	265

Charges that apply to new students only:

Contingency Deposit (refundable)	50
Orientation Fee	200
Early Orientation	250

Other Fees

Clark Student Health Insurance single	\$649
\$1,612 student/spouse	
\$1,495 student/child	
\$2,341 student/2 or more dependents	

Students will be required to enroll in the Clark Insurance Plan unless they complete a waiver card stating they have other coverage.

Application Fee (undergraduate)	50
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Deposits:

Admission Deposit	300
Residence Hall Deposit	100
Tuition Deposit (upperclass students)	300

Note: Costs are subject to change from year to year.

General Information

Tuition, board, residence hall charges, and certain fees are due and payable prior to the beginning of each semester. The dates for 2002-2003 are: Aug. 1, 2002 for fall semester and January 3, 2003 for spring semester. Students are not permitted to register for any semester until all financial obligations have been arranged satisfactorily with the University.

A Budget Payment Plan is available and is explained later in this section.

There is a late fee of \$25 assessed against all accounts not paid in full by the August and January due dates. In addition, interest at the rate of 1 percent per month (12.7% APR) will be charged on all past due balances (including tuition deposit). If a student fails to fulfill his or her financial obligations and their account is referred to a collection agency, all fees are the responsibility of the student.

Payment Options

Clark offers several payment alternatives to the usual tuition payment each semester. These options may be used individually or in combination with each other to best suit the needs of Clark families.

- 1. Family Education Loan:** Clark University is one of a few schools to offer this fixed-rate, supplemental education loan. This loan allows families to borrow up to the full cost of education at a low fixed interest rate. In addition, the loan may be secured with home equity to allow for possible tax benefits. A variable rate option is also available. Contact the Office of Financial Assistance for details.
- 2. Monthly Payment Plan:** Clark University, in cooperation with Academic Management Services, makes available a flexible, interest-free payment plan. This plan allows a family to make 10 equal monthly payments beginning in June. You determine the amount of the bill to be covered—all or only a portion. The \$55 application fee is the only charge. Tuition payment insurance is automatically included.

3. Tuition Inflation Hedge: Under this program, Clark University offers families the option of fixing the tuition rate for four years at the first-year level. To do so, families pay four years of full tuition during the first year, at the current rate, avoiding any increases in tuition for the following three years. For more information and an application, please contact the assistant controller at (508) 793-7498. All past balances will be subject to interest charge of 12 percent per year.

Transcripts

Transcripts must be requested in writing from the Office of Student Records. There is no charge for enrolled students for unofficial transcripts. Official transcripts cost \$4 each. Transcripts are not issued to students with outstanding financial obligations.

Refund Policies

General Refund Policy

Students who officially withdraw or take an official leave of absence from the University are required to submit paperwork to the Dean of Student's Office. A student who officially withdraws during the first one-tenth of the semester will be charged 10 percent of his/her tuition, room, board, and mandatory fees; after the first tenth, but before the end of the first quarter, he or she will be charged 50 percent; after the first quarter, but before the end of the second quarter, he or she will be charged 75 percent. There is no reduction in charges after the second quarter of the semester. If a student withdraws from school, but continues to avail himself/herself of services, he/she will be charged for those services.

Study Abroad Refund Policy

Due to the special conditions for payments to overseas programs, a different policy is necessary. Students who are studying abroad should refer to the documentation provided when they are accepted in the program for specific information on the refund policy.

Medical Refund Policy

If a student's doctor recommends that he/she leave the University for medical reasons within the first half of the semester, and later a decision is made that the student must officially withdraw, charges are calculated in accordance with the schedule above based on the date of the doctor's initial recommendation that the student leave the University. The doctor's letter must be an original on letterhead.

Normal Program and Course Load Variance

A normal full-time academic program is eight course units per year (four course units per semester). Students may elect to vary this pattern by taking three course units during any semester. A course load of three courses per semester is a full-time course load and is billed accordingly. Juniors and seniors who have received College Board permission may choose to take five courses in a semester at no additional charge. All students must complete a minimum of seven full-time semesters to meet degree requirements. Students may enroll in two units per summer. While there is no limit to the total number of summer courses students may take, normally only four units may be counted toward graduation.

Seniors in their last semester are expected to take the necessary number of units (up to five) for their degree. Full-time first-year or transfer students, in their first semester at Clark University, must enroll in a four-course program. Students re-entering the University, or returning from leaves of absence, also must enroll in a four-course program during their first semester. Nontraditional students should consult with the dean of the college.

Orientation Fee

A fee of \$200 is assessed to all new students to cover services and activities provided during orientation. Early orientation is \$250 and spring orientation is \$100.

Contingency Deposit

All new undergraduates are required to pay a \$50 deposit to cover minor charges, such as unreturned library books, which may be incurred during the year. Students are billed each year for whatever charges are incurred. The balance is refunded upon completion of studies.

Housing Deposit

The \$400 fee submitted by first-year students to Admissions includes a \$100 housing deposit. Each spring, a deposit of \$100 is required of students in order to enter the room selection process. The deposit is credited towards the yearly housing fee and is nonrefundable.

Application Fee

A fee of \$50 must accompany the application for admission to the University. It is not refundable.

Student Activity Fee

A fee of \$110 per semester, levied and administered by the Student Council, is required of all matriculated undergraduates except those on a program of study abroad. The Student Council allocates funds to student organizations that provide a wide range of cultural, social, and recreational activities.

Admission Deposit

For entering students planning to live on campus, a nonrefundable admission deposit of \$300 and a housing deposit of \$100 are required to indicate acceptance of an offer of undergraduate admission. For students planning to live off campus, only the \$300 admission deposit is required. Deposits are credited toward charges for the first semester in attendance at Clark. Deposits are forfeited if the student does not enroll for the specified semester.

Tuition Deposit

A deposit of \$300 is required of all students planning to return to the University for their sophomore, junior, or senior years. It is payable by June 1 and is credited toward charges for the fall semester; the deposit of \$300 is forfeited if the student does not enroll for the specified semester.

Clark OneCard

An identification card is issued during orientation to all new students without charge and is your official college ID. Your Clark OneCard looks like an ordinary University ID, but it's much more than that. The wide magnetic strip on the back of your Clark OneCard acts as a key to a number of services on campus including access to residential and academic buildings, Kneller Athletic Center, Goddard Library, meal plans, computer account password, and the CashCard Program. Use a single card for all your transactions.

The CashCard Program works like cash and you can use it at both on-campus and off-campus venues. On-campus venues include Café Bon Appetit, Higgins Bistro, Grind Central, Moonlight Café, General Store, Clark Print & Copy Center and Clark Bookstore. Off-campus venues include Domino's Pizza, Fantastic Café, and PepperCorn's Grille. Vending machine (snack, beverage, and laundry) will be added in the near future.

The cardholder should report a lost or stolen card immediately to the ID office located in Geography 101 or to Bon Appetit Food Services. A fee is charged to replace lost, stolen or damaged cards.

Keys and Key Security

Room keys, mailbox combinations, and residence hall entry cards are issued to students upon their arrival at Clark. Fees are charged for the replacement of keys and cards that are lost during the year, and it is mandatory to return room keys and entry cards before leaving campus at the end of the academic year.

FINANCIAL AID

The Office of Financial Assistance provides guidance to all students who need assistance financing their Clark education.

Student Employment

Student employment opportunities at Clark include on-campus and off-campus part-time jobs and full-time summer employment, coordinated by the Office of Financial Assistance.

At the beginning of each semester, Clark students with federal work-study awards receive a listing of available on-campus jobs and may choose a job best suited to their abilities and interests. It is important to note that an offer of Federal Work Study as part of a student's financial aid package is not a guarantee of that amount, but rather a limit of potential earnings. Students receive paychecks for actual hours worked that can be used for personal expenses, books, and supplies or saved for future bill charges. The Office of Financial Assistance also maintains a list of on- and off-campus jobs available to students not receiving federal work-study awards. The average number of hours worked each week for students who receive Federal Work Study is between 10 and 12 hours.

General Information

Financial aid is allocated on the basis of financial need and academic performance. Special talent in music, art, and other areas, as well as leadership ability, also are considered. Aid is packaged—i.e., a combination of scholarships, grants, loans, and/or part-time employment. The Office of Financial Assistance assesses each student's financial circumstances and need through a uniform analysis of the Free Application for Federal Student Aid (FAFSA) for federal and state funds, and the PROFILE Form for institutional funds. When required, adjustments are made in accordance with University policies and procedures. The assessment takes into account family income and assets, age of parents, financial commitments to other dependents and members of the family, and other circumstances.

The University expects that a student's resources for education will come first from family and his/her own savings and earnings. The University will make every effort to assist most students in obtaining the difference between the total cost and expected family resources. No student should fail to apply for admission to Clark University because of the inability of his/her family to pay total educational costs.

Independent Sources of Aid

All applicants for financial aid are urged to pursue independent sources of financial aid. Clark cannot replace outside funds for which a student is eligible but fails to apply. Scholarships are often awarded to graduating seniors by high schools and/or private scholarship agencies in students' local communities. Additional information usually is available in guidance offices or on-line at www.fastweb.com.

Any assistance received from outside sources other than Clark University must be reported to the Office of Financial Assistance on the Award Acceptance Agreement form or in writing to the Office of Financial Assistance. These awards may affect your Clark financial aid package.

Clark's policy for this adjustments are as follows: For scholarships derived from meritorious sources that are in recognition of a particular achievement of the student, unmet institutional need will be filled first. Any remaining scholarship will reduce loan, then work-study. If there is additional remaining scholarship, it will reduce Clark grant dollar for dollar.

Private grants/scholarships derived from non-meritorious sources (state or federal grants or tuition subsidies based on parents' employment) will reduce Clark grant dollar for dollar.

This policy is effective only for new sources of outside funding. It will not be retroactive for students already receiving funds from outside sources.

Applicants who are residents of Massachusetts are expected to apply for a Mass Grant. To apply, students must complete the Free Application for Federal Student Aid (FAFSA) by May 1, which may be obtained from guidance counselors or financial aid offices. Residents of other states should investigate the possibility of using reciprocal state scholarships (i.e., CT, ME, NH, PA, RI, VT).

An important source of federal financial aid is offered in the form of Federal Pell Grants. These grants, which vary in amounts up to \$4,000 per year, are available to certain students who demonstrate financial need accord-

ing to federal methodology. All applicants for financial aid are required to apply for a Federal Pell Grant. Students may do so by listing Clark University in the college release section of the FAFSA.

Federal Stafford Loans are available to all students, regardless of need. Students may borrow up to \$2,625 their freshman year, \$3,500 sophomore year, and \$5,500 the junior and senior years of an undergraduate program. Students may borrow up to \$8,500 per year of a graduate program. The subsidized version is limited to students who demonstrate financial need according to federal methodology. It is a variable interest rate capped at 8.25 percent. No payments are due, nor does interest accrue, until after graduation or until a student is enrolled on less than a half-time basis. It may be deferred for continued education. The unsubsidized version offers the same terms and conditions; however, interest begins to accrue during the in-school period.

Veteran's benefits may be available for service veterans and children of deceased or disabled veterans. Eligibility can be determined by contacting the local Veterans Administration Office.

Rehabilitation Assistance may be available for students who qualify for educational benefits. Information concerning rehabilitation services can be obtained at the State Rehabilitation Office.

Aid Awarded by Clark University

Clark University makes a commitment to entering students during their first year and in each subsequent year at Clark, as long as they continue to demonstrate financial need, continue to meet the standards of satisfactory academic progress, have filed all necessary application materials by the required deadlines, and have not exceeded program limitations of financial aid, and as long as federal and state funding to Clark's Office of Financial Assistance continues at the same level. Although any Clark student may apply for aid as an upperclassman, funding is guaranteed only to those students who received aid their

first year at Clark and have met the above requirements.

Assistance at Clark is “packaged” in the form of scholarship, loan, grant, and/or employment from the following sources:

- **Clark University Scholarships**—a portion of the University income is reserved for this purpose, and gifts from alumni, parents, and friends provide additional scholarship funds. Eligibility for Clark Scholarships is determined under institutional methodology used in the analysis of the aid application materials.
- **Federal Supplemental Educational Opportunity Grants**—one of three campus-based federal aid programs available to college students demonstrating exceptional financial need. Continued support of this program is contingent upon annual Congressional allocations.
- **Federal Perkins Loans**—one of three campus-based federal aid programs available to college students demonstrating exceptional financial need. Loans made under this program carry a fixed 5 percent interest rate. Payment of principal and accrual of interest is deferred until after graduation or until a student is enrolled on less than a half-time basis. The loans carry a 10-year repayment schedule with a \$40 monthly minimum. Continued support of this program is contingent upon annual Congressional allocations and the repayments of previous recipients.

- **Federal Work-Study**—one of three campus-based federal student-aid programs. This work program allows eligible students the opportunity to work during the school year to earn money for personal expenses, travel, books, and supplies, and over the summer to earn money towards the following school year’s educational expenses.

- **Presidential and Achievement Scholarships**—awarded to exceptional students on a competitive basis.

Satisfactory Academic Progress

Students receiving federal financial assistance of any type (including parent loans) are required to make “Satisfactory Academic Progress” toward their degree. “Satisfactory Academic Progress” is defined by regulations of the U.S. Department of Education as “proceeding in a positive manner toward fulfilling degree requirements.” This is differentiated from “Academic Standing” which refers to students whom the institution allows to continue to enroll.

Full-time bachelor’s degree candidates must maintain a 2.0 cumulative grade-point averages and complete five courses the first year; six courses the second; and seven courses each year thereafter. These requirements are prorated for less than full-time students and students attending less than a full academic year. Evaluation of Satisfactory Academic Progress is made at the end of each spring term.

Students who are determined not to be making Satisfactory Academic Progress are allowed one semester of continued assistance under “probation” status in order to obtain the necessary requirements for maintaining progress. If students are still not making “Progress” after one semester of “probation” status, aid is discontinued. Students are allowed only one semester of “probation” while at Clark. Appeals to this policy for special and unusual circumstances may be made in writing to the director of financial assistance.

Students are limited to eight undergraduate semesters of institutional (Clark) financial aid, unless otherwise approved by the director. Appeals should be written to the Director of Financial Assistance.

Endowed Scholarships

Most grants awarded by the University are designated Alumni and Friends Scholarships. Funds for these scholarships are derived from named endowed funds. Because of the various restrictions placed on these funds, it is the policy of the University to select eligible recipients. Students should not apply directly.

Return of Title IV Funds (Federal and some State financial aid):

Title IV fund rules assume that a student earns his or her aid based on the period of time he or she remained enrolled for the term. Unearned aid, other than work-study, must be returned to the US Department of Education up until the 60 percent point in the term. At the 60 percent point in the term, the student is considered to have earned all of his or her aid.

Return of Institutional Financial Aid

Students are allowed to retain institutional (Clark grants and scholarships, including academic scholarships) financial aid at the same rate that the credit to tuition (refund) policy is calculated. That is to say, a student leaving or withdrawing in the first tenth of a semester has earned ten percent of their institutional financial aid, students leaving or withdrawing in the first quarter are allowed to retain fifty percent of their financial aid, students withdrawing during the second quarter may retain 75 percent of their aid, and students leaving or withdrawing after the second quarter may retain 100 percent of their Clark financial aid.

Financial Assistance for International Student

The Admissions and Financial Aid Committee, in keeping with Clark University’s commitment to a strong international presence on campus, provides financial assistance to a limited number of international students each year. Competition for this assistance is extremely keen and the awards are based on both academic merit and financial need. Since the ability to meet the cost of attendance at Clark University must be taken into consideration, the admissions process is need-aware. Several applicants each year show excellent academic records but do not demonstrate the financial ability necessary to meet the full cost of attendance. It is not unusual for the Committee to deny an application on financial grounds even though the applicant is academically qualified.



Undergraduate Admission Requirements



First-Year Student Admission

Clark University welcomes applications from men and women regardless of race, color, sex, sexual orientation, religion, age as defined by law, handicap, national origin or financial condition. Selection is competitive and based primarily on academic promise as indicated by secondary-school performance, recommendations and standardized test (SAT, ACT) scores. Secondly, decisions reflect consideration of the individual experience and particular circumstances unique to each candidate.

Entrance Requirements

A diploma from an accredited secondary school or G.E.D. equivalency is required for admission to Clark. The academic preparation for successful candidates should include four years of English; three years of mathematics; three years of science; two years of both a social science and a foreign language; and other credit electives, including the arts, recognized in the secondary-school curriculum. The University is most concerned with the strength of the student's academic program and therefore recommends this framework of courses. However, the University values diversity and understands that some students may be following different high school curricular patterns.

The Application

Students applying to Clark should contact the Admissions office for a University application, or they may use other forms, such as the Common Application or College Link. The admissions staff has no preference for any one application form, but may request supplemental information when warranted. A non-refundable application fee of \$50 or official fee waiver request must accompany the applica-

tion. Transfer and international students should contact the Admissions Office for separate application forms.

Clark University
Admissions Office
950 Main Street
Worcester, MA 01610-1477
Telephone: 508-793-7431
Fax: 508-793-8821
Email: admissions@clarku.edu
World Wide Web: <http://www.clarku.edu>

Students who may be applying for financial assistance should refer to information provided in the “Undergraduate Tuition and Financial Aid” section of this catalog.

Early Admission

Exceptional students are invited to apply for early admission when encouraged and supported by enthusiastic recommendations from their secondary schools.

Early Decision

If Clark University is clearly your first choice, we encourage you to apply Early Decision. By signing the Early Decision statement you agree that, if admitted, you will withdraw all other college applications. The Early Decision deadline is November 15, with notification in early January. A candidate who is “deferred” under Early Decision will automatically be reconsidered for regular admission in March.

Regular Admission

Candidates for admission in September should apply as early as possible, usually during the first grading period of their final year of secondary school. The deadline for applications and supporting credentials is February 1 (November 15 for January admission.)

Admission Tests

All U.S. first-year students are required to submit results of the SAT I or American College Test (ACT).

If English is not your primary language, you should submit scores from the Test of English

as a Foreign Language (TOEFL). Successful candidates usually score 213 or better. (See section on International Admissions.)

Interviews and Campus Visits

Interviews are not required but are strongly recommended. The most informative way to learn about Clark University is to spend a day on campus, or even stay overnight. Prospective students are invited to take tours, sit in on classes and meet students and faculty members. Please call, write or send an e-mail to the Admissions Office for information concerning interviews, tour schedules, and directions.

If you cannot visit the campus, we encourage you to talk with one of the University's alumni admissions representatives in your area. For the names, locations and telephone numbers of available alumni, contact the Clark Admissions Office.

Admission Notification and Deposits

Admissions decisions for September are released on or about April 1. Clark subscribes to the Candidate's Reply Date of May 1 and requires a non-refundable deposit that is credited toward first-semester charges. January applicants can expect to receive an admission decision by mid-December with the commitment deposit due within two weeks of notification.

Deferred Admission

Students who want to postpone enrollment must submit a request in writing by the assigned deadline. A non-refundable deposit that is credited toward first-semester charges is required. Students who undertake academic work in the interim may not automatically defer enrollment but must reactivate their applications by submitting official transcripts for review.

Advanced Standing

Placement in advanced courses is determined by individual performance on departmental examinations, which may be oral or written. Students may also earn advanced standing with scores of 4 or 5 on Advanced Placement (AP)

tests administered by the College Entrance Examination Board, submission of certain international educational credentials (i.e., International Baccalaureate, Arbitur, A-Levels, etc.) and by transferring credit from college-level coursework.

International Admission

Clark uses a separate International Application for Admission form for non-U.S. citizens, which may be obtained by contacting the Admissions Office. Because of the sequential nature of University courses, Clark encourages all international students to apply for the fall semester (deadline February 1).

The Test of English as a Foreign Language (TOEFL) is required of all candidates whose native or official language is not English. Information concerning test dates and locations may be obtained by writing to: TOEFL, P.O. Box 6151, Princeton, NJ 08541-6151 U.S.A. or at www.toefl.org. Students who have completed four or more years of U.S. secondary school education—in the U.S. or abroad—should submit results of the SAT I or ACT standardized tests. The Certificate of Eligibility (I-20 form), necessary to obtain a student visa, will be granted only after full admission and receipt of complete financial documentation (in the form of an official bank statement indicating a monetary amount).

Transfer Admission

Clark welcomes applications for admission with advanced standing from students attending two- and four-year institutions. A separate transfer application is required, which can be obtained by contacting the Admissions Office. Applicants for September should file by April 15, January applicants by November 1. All transfer candidates are required to submit evidence of good standing, complete transcripts of all previous academic work—secondary and post secondary—including standardized tests (if taken) and any other information requested by the Admissions Committee, such as recommendations and course-description catalogs.

Normally, credit is given for academic courses in the liberal arts previously taken at accredited colleges and universities and by advanced standing procedures, described above. No credit is given for grades lower than C. Evaluation of credits for college courses is made at the time of admission or upon receipt of final transcripts and is used in planning a program of study at the University. Up to 50 percent of Clark's degree and major requirements may be awarded on this basis, and a minimum of two academic years at Clark is necessary for completion of degree requirements.



Requirements for a Bachelor's Degree

Academic credit toward the bachelor of arts degree is expressed in terms of course units. Each Clark course is awarded one unit (equivalent to four credit hours). To earn a bachelor's degree, a student must complete a minimum of 32 course units (128 credit hours) with a minimum 2.0 grade point average. He/she must receive a C minus or better in at least 24 of these courses. Successful bachelor of arts degree candidates must also complete all institutional, major departmental, and Program of Liberal Studies requirements for graduation. Transfer credit for students with fewer than 32 courses in residence is established by the Transfer Evaluation Committee. Students may accelerate their progress toward graduation by no more than one semester without special approval of the College Board. For the purpose of transfer, a full Clark course is equivalent to four semester hours of credit.

Transfer Credit

To earn a bachelor's degree at Clark, a student must earn at least one-half the total number of course units for the degree and at least one half the total number of course units taken for fulfillment of a major in a Clark program. Students must be enrolled full time at Clark for both semesters of their senior year. Units earned through Clark programs off campus also meet the requirement. External credit is credit earned in the following categories:

1. Advanced placement
2. Credits transferred from other American colleges and universities
3. Credit earned in foreign study programs administered by American or foreign institutions of higher learning other than Clark.

The amount of transfer credit that can be applied to a bachelor's degree at Clark is limited by category.

1. No more than one semester (four units) may be granted in advanced placement (A.P.). A.P. credit is defined as one unit of degree credit assigned for a score of 4 or 5 on a CEEB A.P. examination taken prior to matriculation and before the student formally enrolls. Students also may receive credit for college work completed prior to their matriculation at Clark University if that credit is in a content area deemed academically acceptable to Clark, and is from an accredited college or university. Finally, students may apply for advanced placement credit based on coursework or exams taken in international programs (e.g., International Baccalaureate, A levels, etc.).
2. Students transferring to Clark from another institution may transfer in no more than 16 units of course credit. Students who begin their coursework at Clark may subsequently transfer up to 12 units of course credit from other schools.
3. Normally, no more than one year (eight course units) may be taken in study abroad programs.

Academic Regulations

Full-time study is defined as a three- or four-course program. Normally undergraduates carry four courses per semester. Full-time students must enroll in three or more courses per semester. Students should consult their faculty advisor, or in some cases, the Academic Advising Center or major departments when questions about course or program selection arise. With approval from the College Board, juniors and seniors with a minimum GPA of 3.0 in their prior semester, or with a minimum cumulative GPA of 3.0, may enroll in a fifth course.

While first-year students and sophomores may choose any course designated by a department as open to them, 200-level courses are normally designed for juniors and seniors. Juniors and seniors may elect any 100- or 200-

level course, provided they have met all required prerequisites and have the permission of the faculty member, if necessary.

Undergraduates may be admitted to 300-level graduate courses with the approval of the instructor.

Grades

Grades are an indication of individual performance in each course taken at the University. At Clark, four grading options are currently in use:

1. Graded courses: This option uses the symbols A, B, C, D, and F with the modifying symbols “+” and “-” for A, B, and C. The lowest passing grade is D.

The faculty has approved the following qualitative description of grades:

- A indicates work of distinction, of exceptionally high quality
- B indicates good work, but not of distinction
- C indicates average work and satisfaction of University degree requirements
- D indicates marginal work
- F indicates unacceptable work

2. The Pass/No Record Option: This option uses the symbols P and NR. P indicates work at a level of C- or better. Neither the P grade nor its credit is included in the calculation of the grade point average. Performance below a C- results in a No Record (NR) grade. NRs do not appear on students' transcripts. Students must choose this grade option at registration. There is no limit to the number of NR grades that a student may receive. However, NR grades do not carry credit and are not counted toward graduation or University requirements.

3. The Credit/No Credit Option: This grading option, assigned by the University to a course, uses the symbols CR/NC. CR indicates work at a level of C- or better. The NC is treated like an F.

Grade-point averages are calculated by the University to determine academic good standing, annual and January academic honors, Latin honors at graduation, and eligibility for various honor societies. The grade-point average is calculated as the average of grades earned in all Clark University graded courses. Neither external credit nor ungraded Clark University courses are included in this calculation.

Pass/No Record Option

The availability of the pass/no record option is designed to offer students the opportunity to take a course, usually unrelated to their major, without risking a negative impact on their GPA.

All students should bear in mind that the majority of graduate and professional schools have expressed a preference for graded transcripts and encourage applicants to have graded courses. Preprofessional students and those for whom graduate school is a goal should exercise caution in selecting the pass/no record option. Students who are interested in attaining honors, such as Phi Beta Kappa, Dean's List, and Latin honors at graduation, also should exercise use of the option cautiously.

Noncredit Audit Status

With the permission of the instructor, full-time degree students are eligible to register as auditors in any course. There is no additional charge for this privilege. Part-time matriculated students also may register as auditors with the permission of the instructor and the payment of a per course fee. In limited or sectioned courses, regularly enrolled Clark students are given preference for available openings.

Matriculated students who successfully complete audited courses (this determination is made by the instructor) also will have the audited courses posted on their permanent records. *Note:* Records for nonmatriculating auditors are kept for only the semester in attendance. Transcripts are not issued for audited courses.

Withdrawal From Courses

A student may withdraw from a course at any time during the first two weeks of classes without having a W recorded on his/her transcript. Students may withdraw from a class up until the end of the 10th week of classes, but any withdrawal after the second week of the semester will result in a W being recorded on the transcript. Students compelled to withdraw from a course due to exceptional circumstances (e.g., serious illness) may petition the College Board for the Withdrawal with Reason (WR) transcript notation for the course.

Incompletes

A record of incomplete may be permitted by approval of the College Board or dean of the college only when sickness or some other unavoidable circumstance prevents completion of the course. Individual instructors may not assign incompletes without the approval of the College Board or dean of the college. A record of incomplete incurred in the first semester must be made up no later than the following April 1; if incurred in the second semester, it must be made up no later than the following Oct. 1. If a course is not completed within the specified time, the record of incomplete is changed to F.

Registration

All continuing undergraduates are expected to register in November for the spring semester and again in April for the following fall semester. Details are provided in the registration class schedule each semester. Registrations must be finalized by the end of the second week of classes each semester. Notification of the dates for registration is given, and failure to register within the announced period results in a late fee.

Examinations

Final examinations are given at the end of most courses. Approximately one week is set aside for each examination period, and an attempt is made to distribute examinations for

individual students evenly throughout this period. Absence from a final examination, except for the most compelling reasons, may result in a failure for the course.

Comprehensive final exams are not to be given (or to be due) during the last week of class nor during the scheduled reading period. Other examinations and tests may be given at any time during the course at the discretion of the instructor.

Class Attendance

There is no University-wide class attendance policy. However, many individual instructors do set attendance requirements for their courses.

Student Absence Due to Religious Beliefs

According to Massachusetts state law, any student who is unable, because of his or her religious beliefs, to attend classes or to participate in any examination, study, or work requirement on a particular day, will be excused from that requirement. He/she will have an opportunity to make up any examination, study, or work requirement missed because of such absence, provided the makeup examination or work does not create an unreasonable burden on the University. No fees will be charged by the University for making such opportunities available. No adverse or prejudicial effects will result to any students because of their availing themselves of these provisions.

Course Changes

After registration is completed, a student may enter a course only with the permission of the instructor. Students may add courses up to two weeks after the beginning of classes. Thereafter, a student may enter a course only with the permission of the instructor and the College Board or the dean of the college.

Classification of Students

All students who have not been required to withdraw at the end of the academic year will be promoted if they have satisfactorily completed the following number of courses:

To the sophomore class	6 units
To the junior class	14 units
To the senior class	22 units

Partial Programs

In special circumstances, students may be permitted by the dean of students or the dean of the college to register for a semester program of fewer than three courses. These students are designated as part-time students.

Guest And Special Students

Guest students from other colleges and universities who want to study at Clark for one or two semesters and special students who want to take only a few courses without enrolling as degree candidates may seek approval to do so. Students who wish to enroll as guest students should contact the Admissions Office. Those interested in special student status should contact the Office of Student Records.

Academic Standing

Academic standing is reviewed each semester and is based upon performance during the previous semester. All students are required to pass at least two courses each semester and to maintain a 2.0 grade-point average. In order to remain in good academic standing, first-year students must complete at least five courses with a minimum 2.0 grade-point average by the conclusion of their first year. Sophomores, juniors, and seniors must complete at least six courses with a minimum 2.0 grade-point average for the year. In addition, students may earn no more than eight D grades for credit towards graduation. Students who fail to meet these requirements will be placed on academic probation for the next semester they are enrolled in the institution.

Students who do not maintain academic good standing may be placed on academic probation or may be dismissed by the College Board or the dean of the college. The progress of students who are placed on academic probation is reviewed by the board at the end of the semester on probation.

Students on probation are expected to complete four courses with a 2.0 average or face a required withdrawal for the subsequent semester. A second required withdrawal requires the student to complete two courses at another institution within one semester with grades of "C" or higher prior to their application for readmission to Clark. A third required withdrawal is final.

Academic Integrity

Academic integrity is a basic value for all higher learning. Simply expressed, it requires that work presented must be wholly one's own and unique to that course. All direct quotations must be identified by source. Academic integrity can be violated in many ways: for example, by submitting someone else's paper as one's own; cheating on an exam; submitting one paper to more than one class; copying a computer program; altering data in an experiment; or quoting published material without proper citation of references or sources. Attempts to alter an official academic record will also be treated as violations of academic integrity.

To ensure academic integrity and safeguard students' rights, all suspected violations of academic integrity are reported to the College Board. Such reports must be carefully documented, and students accused of the infraction are notified of the charge. In the case of proven academic dishonesty, the student will receive a sanction which may range from an F in the assignment or course to suspension or expulsion from the University.

Leaves of Absence

A student who is in good standing may apply to the dean of students for a leave of absence, after which he/she may return to the University without formal application for readmission.

No Shows

Students who fail to enroll for two consecutive semesters without taking a formal leave of absence will be administratively withdrawn from the institution. To be considered for readmission after this dismissal, students must apply to the dean of students.

Departmental Honors

Students may be admitted to a program leading to a bachelor's degree with honors in a particular major at the beginning of the junior year or, in some cases, at the beginning of the senior year. In most cases, each student will work with a faculty member who serves as his or her honors advisor and assists with planning the honors research and thesis during the student's junior and senior years. The program may include a maximum of six courses in which the student works under the advisor's supervision. In some cases, students must pass a comprehensive examination given by the department in the senior year.

Students should check with the major department to obtain guidelines for the specific requirements for honors before the end of the sophomore year (although in some departments, applications for honors may be made in the second half of the junior year).

Admission to an honors program does not relieve students of any of the standard major requirements. A student's candidacy for honors will be terminated at the end of any term in which he/she has not maintained a standard of work satisfactory to the department. If candidacy is terminated for any reason, the amount of

course credit to be allowed for honors courses will be determined by the College Board.

The department may recommend that a student graduate with honors, high honors, or highest honors. That recommendation is made to the dean of the college at the completion of the honors program and is announced at graduation. Consult individual departments for details concerning acceptance into their honors programs.

University Honors

Each semester, the dean of the college publishes a list of students who have distinguished themselves by outstanding academic performance in the preceding semester. Honors are awarded to the top students in each class based on semester grade averages.

Upon graduation, Latin honors are awarded at three levels: cum laude, magna cum laude, and summa cum laude. Latin honors are based on the following cumulative grade-point averages: summa cum laude: 3.80 and higher;

magna cum laude: 3.50-3.79; and cum laude 3.40-3.59. Also, to be eligible for Latin honors, students must have completed at least 75 percent of their Clark courses with a letter grade.

Honor societies at Clark include the Society of Phi Beta Kappa, founded at the College of William and Mary in 1776 and dedicated to the recognition and encouragement of outstanding scholarly achievement in liberal studies. The Clark Chapter, Lambda of Massachusetts, was established in 1953. Gryphon and Pleiades is the senior honor society at Clark. Its 12 members include students who have outstanding records of academic achievements and leadership in campus extracurricular activities. The Fiat Lux Honor Society was created in 1988 as a student honor and service society recognizing combined qualities of scholarship and citizenship among Clark juniors and seniors. Qualifications for selection include a minimum 3.3 grade-point average and significant community service.



Facilities and Student Resources



Housing

Clark University provides housing for approximately 1,450 students in eight residence halls and nine houses. Residential staff members are available to assist students with a variety of personal and academic concerns and strive to provide a "living and learning" environment through social, recreational, and educational program opportunities. One residence hall, Dodd, is an all-women residence. All other halls and houses are coeducational. Two halls provide housing exclusively for first-year students and one is designated primarily for upper-class students. Special interest housing includes a "substance awareness house," a "quiet house," and a "year-round house." First- and second-year students, unless commuting from home, are required to live in University housing.

New student assignments are made in late June and returning students select their housing during a March/April room selection process. Approximately one-third of Clark students commute from home or live in private apartments in the immediate neighborhood. A limited listing of available apartments is compiled by the Office of Residential Life and Housing.

Food Services

Bon Appetit Management Company is the University's food service provider. It operates four dining facilities: Higgins Bistro, Café Bon Appetit, and the Café at Grind Central, all located in the Higgins University Center, and the Moonlight Café located in Dana Commons.

Café Bon Appetit is an all-you-can-eat facility serving breakfast, lunch and dinner. Daily menu items feature a delicatessen, grilled and charbroiled food to order, fresh pasta, international fare, vegan and vegetarian options, and a full salad bar with soups and bread. Higgins Bistro is an a-la-carte restaurant with continuous service throughout the day. The menu includes fresh deli sandwiches, salads, grilled and fried items. Both facilities serve faculty, staff and students through the traditional meal plan, Clark cashcard, or cash.

Moonlight Café, located on the second floor of Dana Commons, features personal pizzas, appetizers, grab and go sandwiches, salads, and beverages. Students, staff and faculty are invited for late night food Tuesday through Saturday with their flex dollars, Clark cash card, or cash.

The Café at Grind Central is reopening with a new line of coffee, cappuccino, and specialty drinks. Bagels, express sandwiches, salads, and chili round out the offerings. Like Moonlight Café, the entire university population is encouraged to visit during business hours, Monday through Friday. The Café accepts cash, flex dollars, and Clark cashcard.

Health Services

The Clark University Health Service is a primary care outpatient clinic that provides on-campus health care to full-time matriculated undergraduate students. It is staffed by physicians, nurse practitioners, registered nurses, and support staff. The clinic, located on the first floor of Wright Hall at 30 Downing St., is open Monday through Friday 9 a.m. to 5 p.m. There is always a physician on call when the Health Service is closed.

Students may make an appointment at the Health Service with a clinician for diagnosis, treatment, follow-up, or counseling regarding health problems. Gynecological and contraceptive services are available.

Massachusetts law requires all full- and part-time students to enroll in a qualifying stu-

dent health insurance plan offered by the University or in another health insurance plan with comparable coverage. Failure to submit proof of comparable coverage will result in a student being automatically enrolled in the Clark plan and charged accordingly. In compliance with state law, students may not register for classes until they are enrolled in an insurance plan.

Dean of Students Office

The Dean of Students Office is concerned with the academic and personal well-being of students. Professional counselors are available to assist students and can make referrals to off-campus agencies when necessary or requested. The deans provide confidential services to assist students both in and out of the classroom.

The Dean of Students Office publishes a student handbook, which outlines student support services, the code of general conduct, student activities, housing and residential programs, university committees, and standard University policies and procedures.

Campus Security

The Clark University campus is served by a 12-officer police force, staffed by professionals deputized by the Commonwealth of Massachusetts. University Police are armed and have full arrest and policing powers.

Police take a proactive approach to campus security, offering educational programs to students, faculty, and staff on how to take precautions appropriate to an urban setting. University Police and Physical Plant maintain a network of 45 indoor and outdoor emergency telephones to ensure a quick response to security concerns. An escort service is available for students from 5 p.m. to 4 a.m. during the academic year within a quarter mile of the Clark campus. Clark University, as mandated by federal law, reports annually on the security of its campus. A copy of the Campus Security Report is available at Admissions House and University Police.

Facilities and Resources

Campus Libraries

The Robert Hutchings Goddard Library, named for the Clark physicist who invented the rocket technology that made space travel possible, is the academic heart of the University and an architectural landmark. Goddard is both a traditional and an electronic library with collections and services that are a combination of time-tested and brand new. The collections include more than 584,350 volumes, 281,096 monographs and subscriptions to 1,500 periodical titles. The Library provides full Internet access and nearly 50 end-user subject specific data bases. As a member of the Colleges of Worcester Consortium, Clark offers students the use of eight academic consortium libraries and a combined local collection of more than 3.5 million volumes.

Goddard Library also offers a viewing area for videocassettes; a listening area for compact discs, records, and tapes; a language lab; microcomputers; and terminals linked to the campus computing network. Through the University Computing Center, the Library's menu of electronic information sources including the Public Online Catalog is available 24 hours a day.

The Guy Burnham Map and Aerial Photography Library, founded in 1921, is an active cartographic information center. The collection, global in scope, contains over 200,000 maps and 7,500 aerial photographs, as well as atlases, journals, globes, map reference materials, and tourist information. A depository agreement with the U.S. Government Printing Office insures the availability of a full array of U.S. government maps. The library is located on the lower level of the Geography Building.

The Carlson Science Library, a branch of the Goddard Library, serves the disciplines of biology, chemistry, and physics. Located on the top floor of the Sackler Sciences Center, it houses selected science journals and a research

collection of recent monographs. Full Internet access as well as subject-specific databases are provided.

Computer Facilities

The Office of Information Systems is Clark's focal point for the development and delivery of information services. These services are based on the integration of campus network, central computing, and desktop computing resources. Our campus network connects all principal University buildings, including all residence halls, and consists of a 1 Gbps and 100 Mbps fiber-based backbone with switched and shared 100 Mbps and 10 Mbps segments to the desktop, and is redundantly connected to the Internet. Central resources include host and server systems that support services for students, faculty, and staff. Examples of popular services include the Microsoft Exchange messaging and collaboration system, Lyris list server, Web servers, McAfee Total Service Desk, Microsoft file server, Citrix application servers, McAfee antivirus protection, SmartForce computer-based training, and hardware maintenance contracts. Access to resources is managed through firewall, bandwidth management, and domain structures. Many students bring their own computers to campus, and these resources complement four multimedia lecture halls, two PC and Mac-based teaching classrooms, two general-purpose computing laboratories, and several discipline-specific computer labs.

Science Facilities

The Arthur M. Sackler Sciences Center links the Biology, Chemistry, and Physics departments and houses facilities for both teaching and research. Interdisciplinary programs, such as Biochemistry and Molecular Biology, also are housed in Sackler. State-of-the-art scientific equipment, such as an electron microscope, electron spin resonance (ESR) spectrometer and high-field nuclear magnetic resonance (NMR) spectrometers, serve Clark students

and researchers, as well as others in the central Massachusetts region. A centralized science library and microcomputer rooms also are housed here.

Visual & Performing Arts Facilities

The George F. and Sybil H. Fuller Foundation Center for Music is a state-of-the-art facility for teaching, performing, rehearsing, and experimentally creating music. The center has a computer music studio containing powerful direct digital systems for composition, sound processing, and synthesis based in individual, personal computer work stations.

There is also studio space for drawing, painting, graphic design, visual studies, and photography as well as darkrooms, a sculpture and theater set construction studio, printmaking facilities, and costume design shop. A University Gallery provides learning experiences in arts management and exhibition design.

The Traina Center for the Arts, scheduled to open in September 2002, houses recital and rehearsal space, faculty offices and classrooms.

Athletic Facilities

The Kneller Athletic Center includes a gymnasium with three full-size courts for basketball and volleyball as well as space for indoor badminton, field hockey, running, lacrosse, soccer, softball; a six-lane 25-yard swimming pool with one- and three-meter diving boards; four racquetball courts and two squash courts; two weight rooms; a training room with facilities

for rehabilitation; a dance room; plus locker rooms, offices, and conference rooms.


The 4,300 square-foot James and Ada Bickman Fitness Center, an addition to the Kneller Athletic Center opened in the fall of 1995, provides students with a cardiovascular area and a strength and free-weight area.

Students play outdoor sports at the Russ Granger Fields, which contain six tennis courts, a field hockey field, baseball field and one lighted field for lacrosse, soccer, and intramurals. Clark's intercollegiate softball field and cross country course are a short distance from the main campus. The varsity crew team practices and competes on Lake Quinsigamond.

Division III Intercollegiate Athletics

Clark's 17 intercollegiate varsity teams compete as a member of the National Collegiate Athletic Association (NCAA, Division III) and the Eastern College Athletic Conference (ECAC). Locally, Clark competes in the New England Women's and Men's Athletic Conference that includes Babson College, Massachusetts Institute of Technology, Mount Holyoke College, Smith College, Springfield College, United States Coast Guard Academy, Wellesley College, Wheaton College, and WPI.

Men's Varsity sports include baseball, basketball, crew, cross country, lacrosse, soccer, swimming & diving, and tennis. The women's varsity sports include basketball, crew, cross country, field hockey, soccer, softball, swimming & diving, tennis, and volleyball.



Graduate Program and Research Institutes



Founded in 1887 as the first all-graduate school in America, Clark has continued to offer outstanding master's and doctoral degree programs in the context of an intimate university. Over the years, Clark's graduate school has been at the center of major research breakthroughs in disciplines as diverse as physics, geography, and psychology.

Clark offers graduate programs leading to doctoral and master's degrees. Admission to Clark's graduate programs is open to holders of the bachelor's degree or its equivalent, and is determined on a competitive basis. All programs are administered by the Graduate Board. Completion of a master's degree program generally requires one or two years of study, and completion of the Ph.D. requires at least four years of study, although requirements vary across departments.

Doctor of philosophy degrees are offered in biology, the biomedical sciences, chemistry, economics, geography, history, physics, psychology, and women's studies. Master of arts degrees are offered in biology, chemistry, community development, education, English, geography, geographical information systems, history, international development, physics, psychology, teaching and the interdisciplinary program for environmental science and policy. The master of business administration and master of science in finance are offered by the Graduate School of Management. The College of Professional and Continuing Education offers the master of public administration, a master of science in professional communication, master of science in information technologies, and the master of arts in liberal arts.

Departments that do not, at present, accept candidates for graduate degrees may offer courses suitable for inclusion in a program of

graduate study. Programs crossing departmental lines are also available through the University's individually designed Ph.D. program.

There is a wide variety of financial support available for incoming graduate students. Most departments offer teaching assistantships, fellowships, and research assistantships. Often these come with a stipend as well as tuition grants. Some specific examples of fellowship awards are listed at the end of this section.

Because of the close interaction between the graduate and undergraduate colleges, Clark is able to offer accelerated, five-year master's degree programs. In a program unique to Clark, the fifth year is offered free to students who maintain a B plus average over their undergraduate four years at Clark.

Inquiries and Admission to Graduate School Programs

Inquiries from both U.S. and international students concerning specific programs of graduate and postdoctoral work should be addressed to the chair of the department or program concerned. Visit our website at www.clarku.edu for more information.

Admission to the Graduate School may be granted only by the Dean of Graduate Studies and Research acting for the Graduate Board on the recommendation of a department or program of the University. Formal notification is by official letter from the graduate dean. Applicants should communicate with the appropriate department or program head. The applicant will be provided with an application form, which, accompanied by a \$40 application fee, should be returned to the department or program. In addition, the applicant should arrange for the forwarding of an official transcript of all undergraduate and any subsequent academic work and three letters of recommendation from persons who are competent to judge qualifications for graduate study.

Department or program heads may request the submission of additional material, and most require a record of attainment in the

Graduate Record Examination given by the Educational Testing Service, Princeton, N.J. All applicants are urged to submit their scores on the Graduate Record Examination verbal, quantitative, and advanced tests. Applicants to the Graduate School of Management programs are required to take GMAT rather than GRE examinations.

In addition to an application and \$40 fee, foreign students should provide a certified English translation of official transcripts, evidence of English proficiency (TOEFL), at least three letters of recommendation, and a statement concerning their financial resources or agency support.

Application deadlines vary by department. Please contact the department or program of interest for the date.

Admission to the Graduate School is valid for a specified time only and lapses after that period. If a student is admitted while still a candidate for a degree from another institution, an updated transcript noting the conferring of that degree must be sent directly to the department or program of interest.

Part-time graduate study is possible in some departments. Admission as a special graduate student (nondegree candidate) is a simple enrollment process handled through the Office of Student Records. The grading system for these students is: A-F (with plus and minus) or Pass/Fail.

Master's Programs

Master of Arts

Master of arts degrees are offered in the fields of biology, chemistry, community development, education, English, geography, history, international development, physics, psychology, teaching, and the interdisciplinary program environmental science and policy.

Residency: An academic year (generally eight semester-courses) of study in residence is a minimum requirement for a master's degree. Individual departments or programs may require longer periods of residency.

Foreign Language: Language or other special requirements are included in the department listings in this catalog.

Course and Examination Requirements: Each student must complete at least eight semester-courses in a program approved by the department. One course may be a research course devoted to the preparation of the thesis. Credit for a maximum of two courses at another institution may be approved by the dean of graduate studies and research upon recommendation of the department.

Thesis: The thesis is written on a topic in the field of the student's special interest under the supervision of a member of the department and in a style, length, and format that is appropriate to the problem being researched. Regulations for submission of theses are available from the Graduate School Office.

Graduation Fee: The fee for the master of arts degree is \$100. This covers the cost of the diploma, and binding of the library copy. It is payable when the thesis is deposited with the format advisor. Students who do not write a thesis, including those receiving the degree on the alternative program, must pay this fee no later than the date on which theses are due to the University format advisor.

Alternative Program: A candidate for the degree of master of arts may be recommended for the degree without a thesis after passing a preliminary doctoral examination.

Nonresident Students: Continuing students who are not registered for courses at Clark are required to register for and pay a nonresident fee of \$200 per semester to maintain active status. If fees are unpaid, the student will be dropped from the degree program. (Fees double after three years.)

Master of Arts in Education/Teaching

See program description in the Education section of this book for program requirements.

Post-Graduate Programs in COPACE

Through the College of Professional and Continuing Education (COPACE), Clark

offers Master of Arts in Liberal Arts (MALA), Master of Public Administration (MPA), and Master of Science in Professional Communication (MSPC) degrees and the Master of Science in Information Technology.

The MALA degree program is designed for students wishing to pursue liberal arts education at the graduate level. The Master of Public Administration Program is designed to strengthen and advance the managerial and analytical skills of midcareer managers and executives in public organizations and nonprofit institutions. The Master of Science in Professional Communication is a comprehensive, practical program designed for mid-career professionals. The MSIT is designed to prepare professionals to take a holistic approach, think critically about enterprise objectives, learn the strengths and weaknesses of each technology — how they interface and the ability to envision the totality of e-based systems. For further information, contact the College of Professional and Continuing Education.

Certificate Programs

Through COPACE, the University offers two postgraduate certificate programs: the Graduate Certificate in the Teaching of English as a Second Language, and the Graduate Certificate in Public Administration.

Certificate of Advanced Graduate Study (CAGS)

Through COPACE, Clark offers a Certificate of Advanced Graduate Study (CAGS) in Interdisciplinary Studies, designed for teachers, administrators, and other professionals. The program is open to those already holding a master's degree. Although increased specialization in a student's particular area is possible through the chosen concentration track, the Clark Interdisciplinary Studies CAGS, unlike traditional CAGS offered elsewhere, attempts to foster breadth beyond a discipline. Courses are chosen from several disciplines; the student's focus is interdisciplinary, incorporating and transcending established domains of study.

Master's Programs in the Graduate School of Management

Master of Business Administration/ Master of Science in Finance

The accredited Clark University Graduate School of Management offers programs leading to the master of business administration (MBA) and the master of science in finance (MSF).

Doctoral Programs

Doctor of Philosophy

Doctor of philosophy degrees are offered in biology, biomedical sciences, chemistry, economics, geography, history, physics, psychology, and women's studies. The University also offers an individually designed Ph.D. program for programs crossing departmental lines. Doctoral students in the biomedical sciences and in psychology may also enroll in courses given cooperatively with the University of Massachusetts Medical School, the Worcester Foundation for Biomedical Research, and Worcester Polytechnic Institute. Only well-qualified candidates with proven ability in their special fields of study will be encouraged to proceed to the degree of doctor of philosophy.

Residence: The minimum requirement is one year of full-time study (eight semester courses) beyond the M.A. or its equivalent in part-time work, in residence. If the degree of master of arts has been earned at Clark, this requirement is in addition to the residence requirement for that degree.

Foreign Language: Each graduate department sets its own language or related requirements as the student's field of research may demand and must report such requirements in each case to the dean of graduate studies and research. If a language is required, either a testing service or on-campus tests are employed at the discretion of the department.

Preliminary Examination: Upon completion of preparation in the fields of study, a prospective candidate takes a preliminary examination set by the major department. This examination may be written or oral, or a combination of

both. The chair of the department may invite other scholars from within or outside the University to participate in the examination.

Dissertation: A dissertation, which is expected to make an original contribution to a specialized field of knowledge, is required of each candidate. The dissertation, approved by the chief instructor or dissertation committee, is presented to the examining committee at the final oral examination. An abstract of the dissertation, not exceeding 350 words, and a precis, not exceeding 75 words, both approved by the dissertation advisors, are also required. Four weeks before the degree is to be conferred, a presentation-quality copy of the dissertation, together with two official title pages, an academic history, an abstract and a precis, must be delivered to the University format advisor. At the same time, one or more copies of the dissertation and of the abstract may be required by the major department. The title pages, precis, and academic history forms can be obtained from the format advisor. The presentation-quality copy of the dissertation must be typed or computer-printed as prescribed in Format Regulations for Theses, Dissertations, and Research Papers and Suggestions for the Preparation of Doctoral Dissertations for Microfilming. These instructions are available from the format advisor.

The dissertation and abstract become part of the permanent collection in the University library. A microfilm copy of each dissertation is made by Bell & Howell of Ann Arbor, Michigan, and is available for duplication on request to that company. The abstract is printed in Dissertation Abstracts.

Articles published in referred journals may be accepted in lieu of a dissertation with the approval of the department and the graduate dean.

Graduation/ Diploma Fee: The fee for the doctor of philosophy degree is \$150. It covers the cost of the diploma, hood, publication of the abstract in Dissertation Abstracts, and binding of the library copy of the dissertation. It is payable when the dissertation is deposited with the University format advisor.

Nonresident Students: Continuing students who are not registered for courses at Clark are required to register for and pay a nonresident fee of \$200 per semester to maintain active status. If fees are unpaid, the student will be dropped from the degree program. (Fees double after three years.) For information on nonresident loan deferment status see Graduate Tuition section.

Doctor of Philosophy in Biomedical Sciences

The Biomedical Sciences Ph.D. Program began in 1975 with the recognition that certain individuals without a standard academic background, but with previous research experience and an outstanding aptitude for independent research, may benefit from a relatively unstructured program leading to the Ph.D. degree. This is a cooperative program involving Clark University, the University of Massachusetts Medical School, Worcester Foundation for Biomedical Research, and Worcester Polytechnic Institute. It utilizes the faculty, facilities, and varied research interests in the biomedically related sciences in the Worcester area. The primary criteria for admission are research ability and potential, and evaluation of applicants is based largely on evidence of their previously performed research. Award of the Ph.D. requires passing of a preliminary examination and presentation and defense of a research thesis. Competence in the major field in preparation for the preliminary examination can be achieved through independent study, directed study, or formal courses. The Ph.D. degree may be awarded by either Clark University or Worcester Polytechnic Institute, although dissertation research may be done at any of the participating institutions under the sponsorship of a faculty member from that institution. Areas for dissertation research reflect the varied research programs of faculty from the participating institutions. These include, but are not limited to: cellular and molecular biology; cell senescence; metabolism, endocrinology, and immunology; pharmacology and experimental pathology; reproduc-

tive biology, physiology, neurobiology, and behavioral science; biological engineering, related to nitrogen fixation and development of new symbiotic systems with blue-green algae; bio-mass and bio-energy (silviculture and fermentation technologies).

Admission: The primary criterion used in selection of students for this program is the demonstrated capacity of the applicant to do independent research. In addition to the application form, applicants submit official transcripts of undergraduate and graduate work, Graduate Record Examination (GRE) scores, three letters of reference, and evidence of outstanding research ability (e.g., publications, abstracts, etc.). More complete information may be obtained from the program director.

Applications and all supporting documents should be submitted to Dr. Joseph Bagshaw, Department of Biology and Biotechnology, Worcester Polytechnic Institute, 100 Institute Road, Worcester, MA 01609.

Graduate Grading Policies

The grades of A and B (with plus and minus) are acceptable for graduate credit; anything lower than a B- is not acceptable. A Pass/Fail grading option is possible, where "P" (pass) signifies that the student has performed at a B- or above level. Incompletes are awarded at the discretion of the instructor for a period not exceeding one year.

Graduate Student Services

Graduate Housing

A limited number of on-campus housing spaces are available through the Office of Housing and Residential Programs. Incoming students have priority for this housing. Further details may be obtained from the Office of Housing and Residential Programs, or from academic departments.

Off-campus rooms and apartments for both men and women are available in the immediate area of the University. A limited listing of current housing opportunities is compiled by the Office of Housing and Residential Programs. Students without prior arrangement

for University-owned housing are urged to arrive before registration to seek suitable housing in the area.

For information on meal plans, health insurance, and health services, please refer to the section on Facilities and Student Resources.

**Graduate Tuition and other Charges
Academic 2001-2002**

Full-time Graduate Students:

Tuition: \$25,600 per academic year (or \$12,800 per semester)

In departments that define a full load as four courses per semester, the per-course charge is \$3,200. The per-course charge varies in some departments according to their specific definition of a full program. Students should contact their department chairs to find out which scale applies.

Part-time Graduate Students:

Tuition is charged on a per-course basis according to the scale used in the student's department (generally \$3,200 per course).

Special Graduate Students (nondegree candidates):

Tuition: \$3,200 per course

Tuition and fees differ in the following programs:

- Master of Business Administration
- Master of Science in Finance
(Contact the Graduate School of Management for further details.)
- Master of Arts in Liberal Arts
- Master of Public Administration
- Master of Science in Professional Communication
(Contact the College of Professional and Continuing Education for further details.)

Other Fees

Graduation Fee—payable at the time the thesis or dissertation is deposited with the Office of the Graduate School.

Master's Degrees 100

Doctoral Degrees 150

Students who do not write a thesis or dissertation, including those receiving the degree through an alternative program, must pay this fee no later than the date on which theses are due to the University format advisor (generally, April 1).

Nonresident Fee: 400

Payable Aug. 1 and Dec. 1: \$200 per semester. All degree candidates who are not formally enrolled in coursework must pay the nonresident fee each semester until the final copy of the thesis or dissertation is approved by the University format advisor. If these fees are not paid by the close of the fiscal year, the student will be dropped from the program. (Fees double after three years.)

Loan Deferment

Only students enrolled on at least a half-time basis are eligible for student deferment status on college loans. Non-resident graduate students on a half-time basis are limited to two years of student deferment status.

Graduate Scholarships, Fellowships, and Assistantships

Graduate fellowships and scholarships are provided for well-qualified students by the University from endowed funds and from other sources. Financial aid to graduate students also is available in the form of grants from a number of special funds and, in some departments, from sponsored research grants. A limited amount of part-time employment is available

in the various offices and departments of the University. Students who receive awards must obtain permission from the department before accepting employment. Application for a scholarship or fellowship to begin in September should be made before Feb. 15 to the chair of the department or director of the program in which the applicant expects to do major work. Late applications, after endorsement by the department, go to the dean of graduate studies and research for final approval.

Research Fellowships

These fellowships may be awarded to graduate students who have fulfilled their residence requirements and who are pursuing a full-time doctoral program on campus.

Teaching Assistantships

Teaching assistants are assigned a variety of duties according to the needs of the department. Responsibilities include conducting discussion sessions, supervising laboratory sections, holding tutorial sessions, and grading papers and projects. Assistantships typically involve a commitment of approximately half time (an average of 17-1/2 hours a week). A tuition-remission scholarship or fellowship accompanies this award, and a usual 9-month stipend is \$9,000 to \$12,000, depending on program or department. Additional support up to a 12-month stipend is available in some departments.

Assistantships

Assistantships are available in several departments. Assistantships involve a variety of services, including research with appropriate stipends, and usually provide the student with experience that will be useful in later professional work.

Graduate Fellowship, Scholarship, and Department Funds

Stipends for fellowships and scholarships are provided by endowed funds. For further information about these funds, contact the Graduate School Office.

Research Centers and Institutes

The *George Perkins Marsh Institute* was founded in 1991 to conduct collaborative, interdisciplinary research on human-environment relationships, especially the human dimensions of global environmental change. While not a teaching facility, the Institute is dedicated to training a new generation of researchers and practitioners in holistic approaches to environmental assessment and management through their involvement in a variety of research projects. The Institute is directed by geographer Sam Ratick and includes more than 60 researchers and students from the social sciences, natural sciences, and humanities.

The Institute houses the Marsh Library and four research centers. The Marsh Library is a unique resource of the Institute and offers one of the most extensive collections of research materials in North America on natural and technological hazards and environmental change. The Library holds more than 25,000 volumes (including technical reports, government reports, scholarly books, court cases, and regulatory proceedings), more than 750 journals and newsletters, and various special collections on international development, water resources and energy. The entire catalogued collection is machine retrievable and the librarian is an active researcher and contributor to the fields of hazard assessment and environmental change.

Founded in 1987, *The Center for Technology, Environment and Development* (CENTED) is internationally recognized as one of the oldest

and most prominent centers for the study of natural and technological hazards in the United States. Interdisciplinary research has always been CENED's forte, with current projects ranging from theoretical work on hazard analysis, hazard taxonomies, vulnerability, environmental equity, comparative risk assessment, and risk participation, corporate risk management, hazardous waste transportation and emergency planning. Other research emphases are the central role of urbanization and the related processes of economic and industrial change in defining the impacts of human systems on the global environment, as well as the interaction of land and water-resource use systems with social and ecological change. For example, projects include an examination of gender and land/water use in East Africa, and a comparison of the perceptions of global change in the U.S. with perceptions in Russia.

The Clark Labs for Cartographic Technologies and Geographic Analysis (Clark Labs) is an international leader in the development of computer software and analytical techniques for monitoring and modeling environmental change. Clark Labs continues to develop and distribute IDRISI, a Geographic Information System (GIS) software package that is in use at more than 10,000 sites in over 100 countries worldwide. The faculty of the Center for Community-Based Development have developed extensive, collaborative working relationships with African institutions focusing on the

themes of resources management and institution building. The Center has recently expanded work to Asia and Latin America and broadened its themes to include deep involvement in gender issues, local participation, community institutions, and rural development. Research has focused on slowing and reversing environmental degradation throughout Asia, Africa and Latin America.

Clark's Center for Community-Based Development (CCBD) is the research and training arm of the University's Program for International Development. Building on 30 years of development experience in Africa, Asia and Latin America, CCBD works in partnership with organizations and institutions world-wide to strengthen grassroots planning and action to build sustainable development. Clark's Center for Community-Based Development is unique in its ability to link community institutions, development planners, external agencies and policy-makers.

Housed within the University's George Perkins Marsh Institute, the cross-disciplinary Center is committed to field research and action that develop methods, build capacities, and strengthen local groups to assume a larger role in managing their own livelihood systems and resources. It works with communities around the world to gather data, analyze problems and find collaborative, creative solutions.

The Greening of Industry Network is an international partnership, a research and policy institute without walls, focusing on issues of

industry, environment and society, and dedicated to building a sustainable future.

The Network mobilizes a community of researchers to stimulate the emergence of a new strategic research areas on the greening of industry. It creates a dialogue between this emerging research community and users of this research in business, labor, government, NGOs, public interest groups, and others while providing an opportunity for all stakeholders — with equal voice — to develop research and policy agendas on issues of industry, sustainability and society.

The Jacob Hiatt Center for Urban Education was created in 1991 through a substantial endowment as a permanent partnership between Clark University and the Worcester Public Schools. The center brings together Clark researchers and public school teachers and administrators to find innovative ways to address the challenges and possibilities of contemporary urban schools, especially in light of the diverse cultural backgrounds of the students they serve. The center fosters the work of an interdisciplinary group of scholars and teachers, focusing on studies of language, culture, and learning. It supports teachers as researchers and educational leaders and has developed an innovative teacher education program and a close relationship with six demonstration schools in the city. The center seeks to set a new vision and standard for urban education nationwide. Dr. Thomas A. Del Prete directs the center.

The Heinz Werner Institute for Developmental Analysis is devoted to the application of developmental analysis to all psychological and psychocultural phenomena. The institute is named for Heinz Werner (1890-1965), one of the leading psychologists of the past half century, and the first chairman of the Board of Directors of the Institute of Human Development, founded at Clark in 1957. The institute encourages interdisciplinary conferences and research cooperation among all groups whose primary interest is in the promotion of human development. Dr. Seymour Wapner is chair of the institute's Executive Committee.

The Institute for Economic Studies began its operation in January 1980. The institute is an integral part of the Economics Department, and its main objectives are to research significant economic issues, propose policy options to deal with them, and disseminate the results of the research and its policy recommendations—to a broad audience. The institute provides a framework within which new curricula and teaching methods are developed. In addition, a Scholar-in-Residence Program was instituted in 1984 to stimulate the exchange of ideas and dialogue between guest scholars and members of the institute and economics faculty. The institute director is Attiat F. Ott.



Majors, Minors and Special Programs



ANCIENT CIVILIZATION

Program Faculty

Paul F. Burke Jr., Ph.D., *program coordinator: Greek and Latin language and literature, classical mythology, classical art and archaeology, ancient history*

Everett Fox, Ph.D.: *Jewish ritual and folklore, classical Jewish thought*

Michael Pakaluk, Ph.D.: *history of ancient philosophy, Plato, Aristotle*

Ivy Sun, M.A.: *Latin*

Rhys F. Townsend, Ph.D.: *ancient Greek art and architecture, underwater archaeology, classical tradition in Western art, early Christian and Byzantine art*

Program In Ancient Civilization

The Program in Ancient Civilization consists principally of courses in art history, classics, Jewish studies, and philosophy. This interdisciplinary program covers the entire spectrum of ancient Mediterranean culture including Greek, Hebrew, and Latin languages. By combining art history, Jewish studies, and philosophy with what has been traditionally identified as classics (Greek and Latin language and literature), the Clark Program in Ancient Civilization presents established disciplines in a stimulating and original configuration.

The Major In Ancient Civilization

The purpose of the major is to supply students with a sound knowledge of the ancient Greco-Roman and Judaeo-Christian roots of Western civilization. Majors are expected to acquire a working knowledge of at least one of the principal languages of the ancient Mediterranean (Classical Greek, Hebrew, or Latin); this ensures direct access to the culture, literature, philosophy, and history of the ancient world.

Majors are also eligible to apply for admission to the Intercollegiate Center for Classical Studies in Rome, where they can spend a semester studying Classical literature and archaeology.

Requirements

To graduate as an ancient civilization major, a student must complete with a C- grade or better at least 10 courses in ancient civilization.

These courses must include:

1. At least two courses, from different departments, from among this group of foundation courses:
Art 110, Ancient Greek Art
Classics 111, Roman Art and Architecture
Classics 121, Introduction to Greek Culture
History 174, The Jewish Experience
Philosophy 141, History of Ancient Greek Philosophy
2. At least one semester course at or above the intermediate level (language 103) in Greek, Hebrew, or Latin.
3. A one-semester senior seminar, to be taken preferably during the second semester of the senior year, including a major research paper, arranged in consultation with at least two members of the program faculty by the end of the junior year.

Minor in Ancient Civilization

An interdepartmental minor in Ancient Civilization consists of a total of six courses listed below, or other courses approved for the minor by program faculty. These courses must include:

1. At least two courses, from different departments, from the group of foundation courses listed above.
2. At least two 200-level courses.

Students minoring in Ancient Civilization are strongly encouraged (but are not required) to study Latin, Greek, or Hebrew for their remaining two courses.

Courses

A. Art History

105 THE AEGEAN WORLD

See Art History 105. Mr. Townsend/Offered every other year

106 INTRODUCTION TO ARCHAEOLOGY

See Art History 106. Mr. Townsend/Offered every other year

109 CLASSICAL MYTH AND THE GREEK IDEAL IN ART

See Art History 109. Mr. Townsend/Offered every other year

110 ANCIENT GREEK ART

See Art History 110. Mr. Townsend/Offered every other year

114 ANCIENT CITIES AND SANCTUARIES

See Art History 114. Mr. Townsend/Offered every other year

215 THE TEMPLE BUILDERS: ARCHITECTURE IN ANCIENT GREECE

See Art History 215. Mr. Townsend/Offered periodically

219 SPECIAL TOPICS: ANCIENT ART

See Art History 219. Mr. Townsend/Offered periodically

B. Classics

GREEK

101/102 INTRODUCTORY GREEK

See Foreign Languages and Literatures/Classics. Mr. Burke/Offered every other year

299 SUPERVISED READING IN PHILOSOPHICAL GREEK

A study of selected philosophical texts in Greek. Mr. Pakaluk/Offered every semester

LATIN

101/102 INTRODUCTORY LATIN

See Foreign Languages and Literatures/Classics. Ms. Sun/Offered every year

299 SUPERVISED READING IN PHILOSOPHICAL LATIN

A close reading of selected philosophical texts in Latin. Mr. Pakaluk/Offered every semester

299.1 DIRECTED READING IN LATIN LITERATURE

A reading of selected literary Texts. Ms. Sun/
Offered every semester

CLASSICS COURSES TAUGHT IN ENGLISH

111 ROMAN ART AND ARCHITECTURE/LECTURE, DISCUSSION

Surveys artistic and architectural accomplishments of ancient Rome and the Roman Empire, beginning with the origins of Rome in Bronze Age central Italy. Studies Roman relations with Etruscans, Greeks, and other non-Latin-speaking peoples as manifested in Roman art and architecture. Examines effects of Judaeo-Christian values on the formerly pagan Empire, appearance of a Christian Roman government, and development of distinctively Christian forms of Roman art and architecture. Mr. Burke/Offered periodically

120 THE EPIC JOURNEY/FIRST-YEAR SEMINAR

Surveys examples of ancient epic literature, beginning with the Sumerian Epic of Gilgamesh and the Book of Exodus. Other texts studied include Homer's Iliad and Odyssey and Vergil's Aeneid, all in English translation. The unifying idea of the course will be the concept of the hero and of heroic action in the various cultures of the ancient world. Mr. Burke/Offered every other year

124 INTRODUCTION TO CLASSICAL MYTHOLOGY/LECTURE, DISCUSSION

Studies English translations of ancient Near Eastern, Greek, and Roman literary text (along with some modern ones) to understand the function of myth in Greco-Roman antiquity as a vehicle for artistic communication and social commentary. Emphasizes influence of ancient mythology on later European culture, especially literature and art. Includes slide illustrations. Mr. Burke/Offered every other year

150 JERUSALEM IN HISTORY AND IMAGINATION/LECTURE, DISCUSSION

Surveys fortunes and forms of Jerusalem from Bronze Age to present day. Examines the political and religious visions for the city (pagan, Jewish, Christian, Muslim) and the secular and religious aspirations of these groups as they have become inextricably entangled with the history of the city. Mr. Burke and Mr. Fox/
Offered periodically

157 THE AGE OF NERO/LECTURE, DISCUSSION

Studies the first century of Roman Imperial society, particularly the reign of the emperor Nero (A.D. 54-68). Emphasizes historical, social, and cultural results of consolidation to totalitarian rule in Rome, a form of government that dominated the Mediterranean world and most of Europe for four centuries. Mr. Burke/Offered every other year

262 JEWS AND CHRISTIANS IN THE ANCIENT WORLD

A historical and cultural survey of the complex and tumultuous period between foundations of the Roman Empire and the sixth century A.D., when medieval culture was established in Europe. Studies the struggle between pagan or classical modes of thought and Judaeo-Christian beliefs and values, and the assimilation of each in the other; and the tension within the Christian movement between spiritual and practical concerns as the new religion came to dominate Western culture. Mr. Burke/
Offered every other year

267 RELIGIOUS EXPERIENCE IN THE ANCIENT WORLD/LECTURE, DISCUSSION

Studies religious experience available to people of the ancient Mediterranean from approximately the time of Homer to the official acceptance of Christianity by Roman Imperial government. Includes: nature of polytheist gods, prophecy and oracles, conversion and spread of religious belief, Jewish and Christian monotheism, evil in ancient religious thought, and the rise of Christianity. Mr. Burke/Offered every other year

ART HISTORY AND STUDIO ART

(See Visual and Performing Arts).

BIOCHEMISTRY AND MOLECULAR BIOLOGY

Program Faculty

David L. Thurlow, Ph.D., *program director:*
RNA-protein interactions

Rafael P. Bruschweiler, Ph.D.: *biomolecular*
NMR

Frederick Greenaway, Ph.D.: *bioinorganic*
chemistry, magnetic resonance

David S. Hibbett, Ph.D.: *molecular*
systematics, mycology

Shuanghong Huo, Ph.D.: *protein simulations*

Denis A. Larochelle, Ph.D.: *cell biology,*
cytokinesis

Donald J. Nelson, Ph.D.: *protein chemistry,*
pharmacology

Timothy A. Lyerla, Ph.D.: *somatic cell genetics*

Thomas J. Leonard, Ph.D.: *molecular biology,*
microbial genetics

Deborah L. Robertson, Ph.D.: *marine biology,*
algal physiology

Justin R. Thackeray, Ph.D.: *molecular*
biology, genetics

Emeritus Faculty

John J. Brink, Ph.D.: *metabolic regulation,*
pharmacology, neurochemistry

Undergraduate Program

The Biochemistry and Molecular Biology Program offers an interdisciplinary major that draws on the faculty and course resources of the departments of Biology and Chemistry. Designed to provide students with an in-depth exploration of an area of science that is perhaps the most exciting and actively growing of any today, the program is suitable for students who want to (1) pursue graduate studies in the area, (2) enter medical school with a strong background in basic science, or (3) take laboratory or other science-related positions after graduation. Those wishing to major in bio-

chemistry and molecular biology must select an advisor within the program and file a plan of study with the program director.

Major Requirements

Students first obtain a solid grounding in biology, chemistry, physics, and calculus and then take biochemistry, a year-long course sequence that covers our current understanding of the field. After that, there is a choice between two “tracks,” or alternative ways to complete the major, depending on the individual’s interests.

The core curriculum consists of the following required courses:

Introduction to Calculus (Math 120 and 121, or 124 and 125)

Introduction to Physics (Phys 110 and 111, or 110 and 112)

Introductory Chemistry (Chem 101 and 102)

Introduction to Biology (Biol 101 and 102)

Genetics (Biol 118)

Cell Biology (Biol 137) or Microbiology (Biol 109)

Organic Chemistry (Chem 131 and 132)

Biophysical Chemistry (Bcmb 264)

Biochemistry I and II (Bcmb 271 and 272)

The student will also complete one of the following two groups of courses, emphasizing either biochemistry or molecular biology:

Courses required for the biochemistry track:

Bioanalytical Chemistry (Bcmb 144)

Protein Chemistry (Bmbc275),

Biomolecular NMR (Chem 266) or

Natural Products (Chem 236)

Courses required for the molecular biology track:

Molecular Genetics (Bcmb 228)

Recombinant DNA (Bcmb 231)

Students must also complete two additional courses related to biochemistry and molecular biology. This requirement may be satisfied with any of the program offerings, a directed research course, any biology or chemistry course in the list above (and not already used to fulfill a requirement), or other biology or chemistry courses approved by the advisor.

Honors Program

A student interested in the honors program should contact the program faculty member with whom the student would like to do research, and then apply in writing to the program director for admission. A "B" average is required. In addition to the course requirements listed above, honors candidates must:

- (a) Carry out a research project under the supervision of a faculty member in the Biochemistry and Molecular Biology Program,
- (b) Submit an honors thesis or publication based on the research project,
- (c) Present the research results in a public seminar, and
- (d) Pass a comprehensive oral examination. Students are encouraged to begin their research in the summer following the junior year, if not earlier.

Courses

070 PRESERVING GENOMES/FIRST-YEAR SEMINAR

See Chemistry 070 Mr. Thurlow/Offered every other year

144 BIOANALYTICAL CHEMISTRY/LECTURE, LABORATORY

Presents both theoretical and practical aspects of quantitative analysis as they apply to biological macromolecules—proteins and nucleic acids. Topics include statistical procedures for evaluating analytical data; equilibrium theory; titrimetric, spectroscopic and electrochemical methods of analysis; chromatographic and electrophoretic methods; and kinetic methods of analysis. The laboratory component of the course will emphasize accurate and precise data collection and various computational approaches to data analysis. A significant portion of the laboratory phase of the course will be devoted to carrying out a group research project, such as the isolation and partial characterization of a new protein from a novel biological source. Prerequisite: Chem 271. Mr. Nelson/ Offered every other year

228 MOLECULAR GENETICS/LECTURE, SEMINAR

Explores recent discoveries in the molecular genetics of prokaryotes and eukaryotes, with emphasis on new findings related to catalytic activities of RNA. Topics include: protein synthesis, RNA transcription, gene regulation, RNA splicing, catalytic RNA, and origins of living systems. Intended primarily for seniors and graduate students. Prerequisite: Bcmb 272 or Biology 118 or permission of instructor. Mr. Thurlow/Offered every year

231 RECOMBINANT DNA/LECTURE, LABORATORY

A laboratory-oriented course designed to introduce recombinant DNA methodology. Students undertake a semester-long project, which will vary each time the course is offered. A typical project might involve construction of a genomic library, isolation of specific clones from the library, and characterization of these clones. Methods usually include DNA purification, Southern blot hybridization, restriction enzyme mapping, bacterial transformation, polymerase chain reaction (PCR) and DNA sequencing. Prerequisite: Biology 118, or permission of instructor. Mr. Thackeray/Offered every year.

252 BIOINORGANIC CHEMISTRY/LECTURE

Discusses the chemistry of metals in biological systems and models of these systems. There is a lengthy introduction to general principles and theories of inorganic chemistry and of metal ion and drug transport in biological systems. This is followed by an introduction to physical techniques used in studying metalloproteins. The major part of the course is a discussion of the application of these principles and methods by way of a survey of metallobiological systems. Prerequisite: Permission of instructor. Mr. Greenaway/ Offered periodically

264 BIOPHYSICAL CHEMISTRY/LECTURE, LABORATORY

Emphasizes the physical chemistry of biological macromolecules—proteins and nucleic acids. Covers the basic laws of thermodynamics, molecular thermodynamics (including aspects of modeling macromolecular structure, molecular mechanics and molecular dynamics simula-

tions), statistical thermodynamics, x-ray and NMR structure determination, light scattering by macromolecules, quantum mechanics and spectroscopy, and solution behavior of macromolecules. The laboratory sessions are split between “wet” macromolecular chemistry and computational projects. Prerequisite: Chem/Bcmb 271 or permission of instructor. Mr. Nelson/Offered every other year

271 BIOCHEMISTRY I/LECTURE, LABORATORY

272 BIOCHEMISTRY II/LECTURE

This two-semester course provides a comprehensive and up-to-date survey of the field of biochemistry. The first semester covers cell metabolism and protein structure and function; the second semester deals with nucleic acid, protein metabolism, and other topics. A laboratory component for the first semester acquaints students with methods and instrumentation used in biochemical research. Prerequisites: Biology 101, 102, and Chemistry 132. Mr. Nelson, Mr. Thackeray, Mr. Thurlow/Offered every year

275 PROTEIN CHEMISTRY/LECTURE

Presents an in-depth view of protein structures and molecular properties, and discussions of how structure and properties are inextricably linked to biological function. Topics discussed include: chemical properties of polypeptides, biosynthesis of proteins, post-translational modifications, evolutionary and genetic origins of protein sequences, physical interactions that determine the properties of proteins, the folded conformations of proteins, proteins in solution and in membranes, interaction of proteins with other molecules, enzyme catalysis and protein degradation. This course has a computational component which will provide students with hands-on learning experience using sophisticated molecular modeling/molecular mechanics software packages on a selected protein system. These projects will utilize in-house software packages as well as other programs accessed over the Internet. Prerequisite: Bcmb/Chem 271, or permission of instructor. Mr. Nelson/Offered every other year

297 HONORS

For majors seeking departmental honors in Bcmb: Requires laboratory research, a thesis, and a seminar.

298 INTERNSHIP

Internships are arranged through the Internship Office within the Office of Career Planning and Services. Students may register under Bcmb 298 provided that the Clark internship supervisor is a member of the Biochemistry and Molecular Biology Program. Staff/Offered every semester

299 DIRECTED STUDY

Individual investigations involving laboratory research under the direction of a professor, or advanced readings in the scientific literature. Offered for variable credit. Prerequisite: permission of instructor. Staff/Offered every semester

BIOLOGY

Program Faculty

Thomas J. Leonard, Ph.D., *chair: developmental genetics, secondary metabolism*

Susan A. Foster, Ph.D.: *evolution, behavior and ecology*

David S. Hibbett, Ph.D.: *molecular systematics, mycology*

Linda M. Kennedy, Ph.D.: *physiology, neuroscience, sensory function, taste*

Denis A. Larochelle, Ph.D.: *cell biology, molecular biology*

Todd P. Livdahl, Ph.D.: *population biology, community ecology, evolution, biostatistics*

Timothy A. Lyerla, Ph.D.: *somatic cell genetics, vertebrate pigmentation, mouse models for genetic disorders*

Deborah L. Robertson, Ph.D.: *marine biology, algal physiology*

Justin R. Thackeray, Ph.D.: *molecular biology, genetics, signal transduction*

Nicholas S. Thompson, Ph.D.: *animal behavior, evolutionary theory*

Adjunct Faculty

Halina S. Brown, Ph.D.: *health and risk assessment, environmental chemistry, regulatory toxicology*

Frederick T. Greenaway, Ph.D.: *bioinorganic chemistry, enzymology*

Stanley R. Herwitz, Ph.D.: *hydrology, soil/water plant relationships, biogeography, field methods and instrumentation*

Donald J. Nelson, Ph.D.: *biochemistry, bioinorganic chemistry*

David L. Thurlow, Ph.D.: *molecular biology*

Affiliate faculty

Clayton B. Cook, Ph.D.

Craig Ferris, Ph.D.

Philip Robakiewicz, Ph.D.

Emeritus Faculty

Vernon Ahmadjian, Ph.D.

John J. Brink, Ph.D.

Joseph C. Curtis, Ph.D.

H. William Johansen, Ph.D.

John T. Reynolds, Ph.D.

Undergraduate Program

The department offers courses that (1) prepare students for work and advanced study in the biological and biomedical sciences, (2) provide support for other programs within the University that require students to obtain a background in one or more subfields of biology, and (3) meet the needs of nonscience majors who wish to integrate the perspectives of the science of biology into a liberal arts curriculum. The major in biology is especially suitable for students who intend to go on to professional schools in the health sciences or graduate work in a variety of subfields of the biological sciences.

The department provides a set of requirements for students wishing to optimize their breadth of exposure to the field as a whole. The department encourages students to identify an area to emphasize within biology, and to plan a sequence of courses that will provide depth of exposure to the topics within that area, including a research experience, if possible.

The department offers two general curricula: one in Cell and Molecular Biology and one in Ecology & Evolution. Prospective majors are urged to consult with an advisor selected from the department's faculty, especially to take advantage of opportunities to participate in ongoing research in the honors program, specialized research courses, and internships.

Please note that the two-semester course, Introduction to Biology (Biology 101 and 102) is a prerequisite for all other courses in biology that will be used to meet the requirements for the major.

Requirements for All Biology Majors

- 10 courses in biology, including Biology 101 and 102 (see below)
- Two courses in chemistry (Chemistry 101 and 102)
- Courses in mathematics to include a year of calculus (Mathematics 120 and 121, or Mathematics 124 and 125), or one semester of calculus combined with Quantitative Methods in Biology (Biology 106); if Quantitative Methods in Biology is used to meet this requirement, it will not count toward the total of 10 required biology courses.
- Two additional courses in chemistry, geology, computer science, mathematics (at 120 level or higher) or physics. Aside from Introduction to Physics and Introduction to Geology, none of these may be designated as SP courses.
- Science and mathematics courses offered to meet the major requirements may not be taken with a pass option

At least two of the 10 required biology courses must be at the 200 level or above, and no courses carrying the SP designation except Biology 101 and 102, Chemistry 101 and 102, and Physics 110 and 111 may be used to satisfy major requirements.

Additional Requirements for the Generalized Biology Major

One course must be completed in each of the following three areas:

1. Molecular and Cell Biology, including Genetics (Biology 118), Cell Biology (Biology 137)
2. Organismal Diversity, including Microbiology (Biology 109), Botanical Diversity (Biology 110), Comparative Vertebrate Anatomy (Biology 112), Biology of the Brain (Biology 140), Introduction to Fungal Biology (180)
3. Ecology and Evolution, including Evolution (Biology 105), Marine Biology (Biology 114), Ecology (Biology 216), Population Biology (Biology 220)

Additional Requirements for the Curriculum in Ecology & Evolution

The eight biology courses beyond Biology 101, 102 shall be structured as follow:

- Biology 105 (Evolution)
- Two courses that are primarily informational in content, aimed at describing a wide variety of aspects of the natural environment or evolution, including, Biology 110 (Introduction to Plant Diversity), Biology 112 (Comparative Vertebrate Anatomy), Biology 114 (Marine Biology), Biology 180 (Introduction to Fungal Biology), Biology 242 (Animal Behavior)
- Two courses with an analytical or theoretical orientation, including Biology 118 (Genetics), Biology 135 (Paradox of Animal Sociality), Biology 216 (Ecology), Biology 220 (Population Biology), Biology 254 (Molecular Evolution)
- One course that develops research techniques: Biology 109 (Microbiology), Biology 201 (Ecology of Atlantic Shores), Biology 280 (Biostatistics and Computer Applications), Biology 213 (Forest Hydrology and Field Methods)

- One seminar course: Biology 222 (Community Ecology), Biology 204 (Watershed Ecology), Biology 223 (Topics in Marine Biology), Biology 243 (Seminar in Evolution)
- Capstone project: at present, this can be fulfilled through a directed research project with one of the faculty members on the curriculum committee, or an internship in an area relevant to ecology and evolution, as approved by the committee.

Special Field Courses

Biology majors are encouraged to take field courses and to become engaged in field research projects. Clark University maintains formal affiliations with the following organizations, enabling students to apply for admission and, in some cases, preferential financial aid consideration. Courses from these organizations can be taken in place of other courses required for either the generalized biology major or the curriculum in Ecology & Evolution.

The Bermuda Biological Station is an internationally renowned center for marine biological and oceanographic research. Intensive summer field courses are available for qualified Clark students. Any of these courses can be taken for biology major credit.

The Semester in Environmental Sciences is offered in the fall by the Ecosystems Center, at the Marine Biological Laboratories, Woods Hole, MA. Students enrolled in SES receive four units of credit for participation in this research intensive academic program

The School for Field Studies operates six centers at which semester-long field-oriented courses may be taken for four credit units:

- The Center for Rainforest Studies (Australia)
- The Center for Marine Resource Studies (Turks and Caicos Islands, Caribbean)
- The Center for Wildlife Management Studies (Kenya)
- The Center for Coastal Studies (Baja, Mexico)

- The Center for Sustainable Development Studies (Costa Rica)
- The Center for Rainforest and Fisheries Studies (British Columbia, Canada)

Clark students are also eligible for admission into summer courses at these centers. Students interested in taking any of these courses for credit toward the major must first take at least one course in either the organismal or population areas (biology course categories 2 or 3 described above).

The specific course offerings at the Bermuda Biological Station and the School for Field Studies may change each year. Recent, detailed information on the School for Field Studies and the Bermuda Biological Station is available at Web sites maintained by those organizations (www.fieldstudies.org and www.bbsr.edu). Students who wish to apply for these or other off-campus course programs are urged to consult with their biology advisor to ensure that the program will satisfy the student's needs for a well-planned biology major.

Honors Program

Well-qualified upper-division majors are eligible for admission to a program that can lead to a bachelor of arts degree with honors. A candidate for honors must meet all requirements of the major, maintain a high grade point average, complete an independent research project under the direction of a departmental faculty member, prepare an acceptable thesis, and pass a final comprehensive examination. The criteria for admission into the honors program are outlined in material available from the department.

Minor in Biology

The requirements for a minor in Biology are:

1. BIO 101 and 102 Introductory Biology
2. Four additional courses spanning at least two of the three subject categories set out in the Generalized Biology Major. A selection of appropriate courses in each designation is listed in the description of the major, but stu-

dents are not restricted to selecting from this list. At least one of the four must be at the 200-level and none can carry the SP designation. All students wishing to complete a minor must select courses, receive approval from their Biology Faculty Advisor, and declare the minor by the end of the junior year, although earlier is recommended.

B.A./M.A. Degree Program

This plan, which enables students to complete the requirements for the bachelor of arts and the master of arts degrees within five years, is intended for students who develop sharply focused research interests. Undergraduates who will have completed the chemistry and mathematics requirements for the biology major by the end of their third year may apply for admission to this program during the second semester of their third year.

Students accepted into the program will be advised individually by a committee of faculty members who will set forth the specific course requirements and research expectations for the master's portion of the program. Courses taken at the 200 level or higher may be counted toward the course requirements for both the bachelor's degree, which will normally be awarded after the fourth year, and the master's degree, normally awarded after the fifth year.

A successful preliminary examination, submission of a thesis, and a final examination based on the contents of the thesis are required of all master's degree recipients. Specific requirements of the program and application procedures are available in the department office, or our website at <http://clarku.edu/biol>.

Graduate Program

The department offers course work leading to the doctor of philosophy degree in biology. The department has two foci for graduate emphasis: molecular and cell biology or ecology and evolution.

Students applying for admission must demonstrate adequate preparation in the basic sciences, an overall undergraduate record of B or better, and satisfactory scores on the

Graduate Record Examination (and TOEFL for International Students.). Tuition scholarships and research and teaching assistantships are available to qualified students. Further information can be obtained from the department or our website at <http://clarku.edu/biol>.

Courses

040 BRAIN AND ENVIRONMENT/FIRST-YEAR SEMINAR

This seminar is a laboratory-focused course on how we use specialized systems in our brains to find out about our environment. The class as a group will conduct original research on unsolved problem in human sensory physiology: how we detect and identify a food substance as "sweet." We will review the known anatomy and physiology of the brain system for taste and discuss how systems for seeing, hearing, smelling, and touching are similar. Then we will consider recent research on the problem of sweet taste, work out the details of our experimental design, test a group of human subjects, and analyze and interpret the data. Each student will write a final paper reporting the research in the style of a scientific journal article. Enrollment is limited to 12 students. A high school chemistry background is recommended. Fulfills the science perspective. Ms. Kennedy

101 INTRODUCTION TO BIOLOGY I/LECTURE, LABORATORY

102 INTRODUCTION TO BIOLOGY II/LECTURE, LABORATORY

This two-semester course is designed with three goals in mind: (1) to provide students with an understanding of the unifying themes in modern biology, (2) to introduce students to the diversity of life forms at all levels of organization, and (3) to illustrate the methods and modes of scientific inquiry in the biological sciences. The emphasis is on cellular and molecular biology during one semester and organismic and evolutionary biology during the other semester. Both semesters must be completed before a student can enroll in advanced courses offered to satisfy the requirements of the biology

major. Qualified students must obtain approval from the chair of the department to have this requirement waived. Staff/Offered in sequence every year

104 BIODIVERSITY/LECTURE

Students will explore the diversity of life on earth and the mechanisms by which this diversity is thought to have been generated. The implications of loss of biodiversity will be considered as will the causes of biodiversity decline, and conservation issues will be addressed. Satisfies the science perspective. Not for biology majors. Ms. Foster and Mr. Hibbett/Offered alternate years

105 EVOLUTION/LECTURE, LABORATORY, DISCUSSION

An introduction to the mechanisms and patterns of evolutionary change during the earth's history. Although this course will briefly survey the major evolutionary events that have occurred since life first evolved, the emphasis will be on mechanisms of evolutionary change (e.g. mutation, natural selection, genetic drift and gene flow) and resultant patterns (e.g. phylogenetic pattern, co-evolution, stasis, adaptive radiation). Prerequisites: Biology 101 and 102. Ms. Foster/Offered every year

106 QUANTITATIVE METHODS IN BIOLOGY/LECTURE, LABORATORY

An introduction to mathematical and statistical methods that are most useful to biologists, this course provides skills that are useful in organizing and summarizing data, graphic methods of data presentation, and testing hypotheses based on experimental results. Key mathematical methods for describing biological phenomena are included, along with basic techniques for identifying differences among groups and relationships among variables. This course may be used by biology majors to fulfill part of their mathematics requirement; alternatively, it may be counted among the required ten biology courses for the major. Prerequisites: Biology 101, Biology 102, and one semester of calculus (Mathematics 120 or 124). Mr. Livdahl/Offered every year

109 MICROBIOLOGY/LECTURE, LABORATORY

Introduces the fundamental principles and methods of microbiology with applications to the biomedical and environmental sciences. Emphasis is on bacteriology. Prerequisites: Biology 101 and 102 and Chemistry 102, or permission of instructor. Mr. Leonard/Offered every year

110 INTRODUCTION TO BOTANICAL DIVERSITY/LECTURE, LABORATORY

Biodiversity and structure of plants, protists, and fungi are examined in a phylogenetic context. The evolution of photosynthetic mechanisms, transport systems, and nutritional modes are considered, as are the ecological and economic significance of plants and other organisms traditionally studied by botanists. Prerequisites: Biology 101 and 102. Mr. Hibbett/Offered every year

112 COMPARATIVE VERTEBRATE ANATOMY/LECTURE, LABORATORY

A review of the morphology of the vertebrates with emphasis on evolution from fishes to mammals. Anatomical analyses of organ systems are stressed. Prerequisites: Introductory Biology at the college level. Mr. Lyerla/Offered every year

114 MARINE BIOLOGY/LECTURE, FIELD TRIPS

Introduces the diversity and ecology of life in the oceans. Studies of basic physical oceanography and marine ecology precede studies of marine ecosystems such as salt marshes, kelp forests, rocky shores, plankton, and deep seas. Also included are the relationships of marine biology to the welfare of mankind. Prerequisites: Biology 101 and 102. Ms. Robertson/Offered every year

118 GENETICS/LECTURE, LABORATORY

Investigates the nature of genes and their role in governing heredity in both prokaryotes and eukaryotes. Includes the principles of gene transmission, the nature of gene and chromosomal mutation, principles of gene mapping. Some aspects of molecular genetics and mechanisms of gene expression will be discussed but

are not a major part of the course. Additional topics include population and quantitative genetics, as well as the role of genes in behavior. Also includes an integrated laboratory that highlights many aspects of the lectures. Prerequisites: Biology 101 and 102. Mr. Thackeray/Offered every year

122 ECOLOGICAL SYSTEMS/LECTURE, LABORATORY

Introduces ecological science and practice, including population, community and ecosystem levels of approach. The objective of the course is to ground students in ecological theory and methods and to examine the impacts and consequences of human modification of natural ecosystems. Satisfies the science perspective. Ms. Foster/Offered alternative years

135 THE PARADOX OF ANIMAL SOCIALITY/LECTURE, DISCUSSION

See Psychology 135. Prerequisites: Biology 101 and 102. Mr. Thompson/Offered every year

137 CELL BIOLOGY/LECTURE, LABORATORY

The cell as a functional unit is discussed from the molecular level to the whole cell. Included are introductions to the biochemistry and metabolic roles of some of the molecules and macromolecules that are found in cells. Also discussed are the evolution, structure, and function of the various subcellular organelles and the cytoskeleton. Emphasis is placed on understanding the molecular mechanisms behind cell physiology and the experimental methods used to determine those mechanisms. Prerequisites: Biology 101 and 102. Mr. Laroche/Offered every year

140 BIOLOGY OF THE BRAIN/LECTURE, LABORATORY, DISCUSSION

An introduction to the organization and function of the nervous system. Lectures focus on the human brain with reference to knowledge obtained from animal models. Includes basic information about the anatomical, physiological and chemical properties of the brain and how these properties enable us to perceive and move around in our environment.

Laboratory/Discussion sessions include demonstrations of nerve cell signalling, testing of human reflexes and sensory perception, dissections, and discussion of issues that arise in modern neuroscience: understanding the relation between the mind and brain.

Prerequisites: Biology 101 or permission of instructor. Ms. Kennedy/Offered every year

141 BRAIN AND BEHAVIOR/LECTURE, DISCUSSION

An exploration of how specific neural systems are involved in various behaviors. Emphasizes first, systems where the relationships between brain and behavior are best understood, such as perception, motivation, mood, emotion, sleep and consciousness, language and attention. Second, information from the frontiers of neuroscience about how the biology of the brain changes as the result of the experiences of the individual, including mechanisms for learning and memory, is discussed.

Prerequisite: Biology 140. Ms. Kennedy/Offered every year

180 INTRODUCTION TO FUNGAL BIOLOGY/LECTURE, LABORATORY

Introduces the diversity, ecology, and evolution of fungi. Lectures emphasize morphological and ecological attributes of fungi, and their significance to humans. Topics to be addressed include medical mycology, fungal symbioses and nutritional modes, and fungal physiology. Laboratories will provide experience in culturing fungi and manipulating life cycles in vitro. Field trips will provide opportunities to collect and observe fungi in their natural habitats.

Prerequisites: Biology 101 and 102.

Mr. Hibbett/Offered every other year

201/301 ECOLOGY OF ATLANTIC SHORES/LECTURE, FIELD TRIP

This course explores the ecology of marine organisms found in diverse Atlantic habitats, ranging from the rocky intertidal of New England to the coral reefs of Bermuda. The course includes lectures, field research, and a one-week trip to the Bermuda Biological Station for Research during semester break.

An additional laboratory fee is required for this

course. Prerequisites: Biology 101, 102.

Recommended: Biology 114 or 216.

Mr. Livdahl and Ms. Roberston/Offered every fall

204/304 WATERSHED ECOLOGY/SEMINAR

Advanced seminar examining current scientific literature on the biogeochemistry of contrasting forested ecosystems. Topics include the inputs, outputs, and internal transfers of energy and nutrients in north temperate hardwood forests, tropical rainforests, cloud forests, eucalypt woodlands, and baldcypress swamps. The Hubbard Brook ecosystem study is considered in detail. Prerequisites: Biology 101 and 102.

Mr. Herwitz/Offered every year

216/316 ECOLOGY/LECTURE

Provides an overview of ecology as a scientific discipline. The primary emphasis is on efforts to explain and predict the distribution and abundance of organisms, how ecological communities are composed, and why they vary in time and space. Prerequisites: one or more courses from the organismal biology group and one college-level math course. Mr. Livdahl/Offered every year

217/317 ECOLOGY OF INFECTIOUS DISEASE/SEMINAR

Explores the relationship between infectious disease agents and their hosts, and how that interaction can effect changes in the abundance of host and pathogen populations. Factors that contribute to the occurrence and persistence of epidemics, the evolution of virulence and transmission, and strategies for controlling epidemics will be considered using theoretical approaches and case studies of diseases affecting humans and other hosts. A wide spectrum of human diseases will be considered, including human pathogens of recent concern (examples include HIV, Lyme Disease, West Nile Virus) and of historic and continuing importance (e.g., schistosomiasis, bubonic plague, malaria, smallpox, yellow fever).

Prerequisites: Biology 216, or Biology 220.

Mr. Livdahl/Offered periodically

218/318 GENETICS AND DISEASE/LECTURE, DISCUSSION

Inherited disorders in humans. Consideration of methods and results of mapping and cloning disease genes in humans. Special topics include animal models for human genetic diseases and current trends in therapies for genetic disorders. Prerequisites: Genetics and Introductory Chemistry. Mr. Lyerla/Offered every year

220/320 POPULATION BIOLOGY/LECTURE

Examines the properties that exist only at the population level, including schedules for birth and death, population growth patterns, spatial variation in abundance, genetic variation, and the factors that modify these features over time. Prerequisites: Biology 118 and 216, or permission of instructor. Mr. Livdahl/Offered every other year

221/321 DEVELOPMENTAL BIOLOGY/ LECTURE, LABORATORY

Considers the fundamentals of development from the molecular level up to the organismal. Emphasis is placed on the major animal model systems. Prerequisites: Biology 137 or permission of instructor. Mr. Larochelle/Offered every year

222/333 COMMUNITY BIOLOGY/SEMINAR

Factors affecting the biological structure of natural communities are examined, with close attention to field experiments on competition and predation. Prerequisites: Biology 101, 102 and permission of instructor. Mr. Livdahl/Offered periodically

223/323 TOPICS IN MARINE BIOLOGY/LECTURE, SEMINAR

Provides an opportunity to delve in depth into selected topics in marine biology. Studies biological oceanography, marine ecology, marine coastal and open ocean communities, and relationships between humans and the sea. Limited to 15 students. Prerequisite: Biology 114. Ms. Robertson/Offered periodically

226/326 RESEARCH IN BIOACOUSTICS/ LABORATORY, DISCUSSION

*See Psychology 226. Prerequisites: Biology 101 and 102. Ms. Wiser/Offered every year

227/327 ADVANCED CELL TECHNOLOGY/LABORATORY, DISCUSSION

Special research projects in somatic cell genetics. Topics include somatic cell hybridization, gene transfer, and genetic complementation. Students review and discuss recent primary literature in these areas as well as background literature for their research. Prerequisites: Cell Culture Techniques. Mr. Lyerla/Offered periodically

228/328 MOLECULAR GENETICS/LECTURE, SEMINAR

Explores recent discoveries in the molecular genetics of prokaryotes and eukaryotes, with emphasis on new findings from recombinant DNA technology and DNA sequencing. Topics include: protein synthesis, RNA transcription, gene regulation, repetitive DNA, gene cloning, split genes, gene families, transposable elements, oncogenes, and antibody gene rearrangement. Intended primarily for seniors and graduate students. Prerequisite: Biology 118 or 272, or permission of instructor. Mr. Thurlow/Offered every other year

229/329 PRINCIPLES OF CELL CULTURE/LECTURE, LABORATORY

An introduction to the methods used for propagation and experimental investigations of cells derived from multicellular organisms. Topics to be covered include husbandry of established cell lines, preparation of media, cell selection methods, cloning, and production of cell lines. Prerequisites: Biology 109, or permission of instructor. Mr. Lyerla/Offered every year

231/331 RECOMBINANT DNA/LECTURE, LABORATORY

A laboratory-oriented course designed to introduce recombinant DNA methodology. Students undertake a semester-long project, which will vary each time the course is offered.

A typical project might involve construction of a genomic library, isolation of specific clones from the library and characterization of these clones. Methods usually include DNA purification, Southern blot hybridization, restriction enzyme mapping, bacterial transformation, polymerase chain reaction (PCR) and DNA sequencing. Prerequisite: Biology 118, or permission of instructor. Mr. Thackeray/Offered every year

234/334 SIGNAL TRANSDUCTION/LECTURE

An advanced course exploring the various molecular and biochemical pathways through which cells communicate with themselves and the extracellular environment. Topics include protein phosphorylation, G-proteins, phospholipid metabolism, the action of oncogenes, and several ionic signalling pathways. Both lectures and student presentations of papers culled from current literature. Prerequisite: Biology 137 or 271, or permission of instructor. Mr. Larochelle and Mr. Thackeray/Offered periodically

238/338 SEMINAR IN CELL BIOLOGY/SEMINAR

Discussion based on research papers from the current literature, will be focused on an area in cell biology selected by the participants on the first day. The weekly readings will be selected by both the students and the faculty member. The scientific content, as well as the methodology will be discussed in detail. Prerequisites: Biology 137 or permission of the instructor. Mr. Larochelle/Offered every year

240/340 HUMAN PHYSIOLOGY/LECTURE

Introduces the principles underlying physiological function. Lectures cover the subcellular, cellular, and organ levels of organization and place a primary emphasis on the integrative processes whereby all of the diverse organs and systems contribute to the performance of the complete individual. Prerequisites: Biology 137 or 271. Enrollment is normally restricted to Juniors, Seniors and Graduate Students. Ms. Kennedy/Offered every year

241/341 RISK ASSESSMENT IN ENVIRONMENTAL TOXICOLOGY/LECTURE

See ES&P 241. Ms. Brown/Offered every other year

242/342 ANIMAL BEHAVIOR/LECTURE, LABORATORY

Examines the causes and evolution of the behavior of animals. The largest part of this course will focus on the adaptive value and evolution of behavioral patterns, but a general overview of behavioral development and causation will be provided to offer the necessary background for interpretation of the ultimate causes of behavior. Prerequisites: Biology 105 or 220 and permission of instructor. Ms. Foster/Offered even years

243/343 SEMINAR IN EVOLUTION

Discussion of a topic in evolution selected by interested students the previous fall. Readings will be from original literature. The format will be a combination of lecture and discussion. Prerequisites: Biology 105 and 118 or 220. Permission of instructor required. Ms. Foster/Offered odd years

246/346 CANCER: SCIENCE AND SOCIETY/SEMINAR

See ES&P 246. Ms. Brown/Offered every other year

250/351 IMMUNOLOGY/LECTURE, DISCUSSION

Immunology is a study of the principles of innate and adaptive immunity. We first introduce the cells of the immune system, and the tissues in which they develop and through which they circulate or migrate. We discuss the specialized functions of the different types of cells and the mechanisms whereby they eliminate infection. Prerequisites: Permission from instructor. Mr. Leonard/Offered every other year

271/371 BIOCHEMISTRY I/LECTURE, LABORATORY

272/372 BIOCHEMISTRY II/LECTURE, DISCUSSION

This two-semester course provides a comprehensive and up-to-date survey of the field of biochemistry. The first semester covers cell

metabolism and protein structure and function; the second semester deals with nucleic acid and protein metabolism and other topics. A laboratory component for the first semester acquaints students with methods and instrumentation used in biochemical research. Prerequisites: Biology 101, 102, and Chemistry 132. Mr. Nelson, Mr. Thackeray, Mr. Thurlow/ Offered every year

280/380 BIOSTATISTICS AND COMPUTER APPLICATIONS/LECTURE

Provides a background in the basic methods of data analysis for biologists, applications of mathematics to the description of biological phenomena, and the generation of testable hypotheses from models of biological processes. Prerequisites: one or more biology courses beyond Biology 101 and 102. Mr. Livdahl/ Offered every year

297 HONORS IN BIOLOGY

Readings and research for students in the Honors program. Staff/Offered every year

298 INTERNSHIP

Independent research at off-campus sites for the purpose of broadening the backgrounds of qualified students. Each internship is guided by an on-site professional and a department faculty member. Staff/Offered every year

299 DIRECTED STUDY

Advanced readings or research under the direction of a department member. Prerequisite: permission of instructor. Staff/Offered every year

350 GRADUATE RESEARCH SEMINAR

Invited lecturers present seminars on varied research topics. Required for all graduate students. Offered for variable credit. Staff/Offered every semester

397 MASTER'S THESIS

Offered for variable credit. Staff/Offered every year

398 DOCTORAL DISSERTATION

Offered for variable credit. Staff/Offered every year

THE GUSTAF H. CARLSON SCHOOL OF CHEMISTRY AND BIOCHEMISTRY

Department Faculty

Daeg S. Brenner, Ph.D.: *nuclear*

Rafael Brüschweiler, Ph.D.: *physical, biophysical*

Karen L. Erickson, Ph.D.: *organic, natural products*

Frederick T. Greenaway, Ph.D.: *bioinorganic, enzymology*

Shuanghong Huo, Ph.D.: *computational chemistry, biophysical*

Alan A. Jones, Ph.D.: *polymer, physical*

Donald J. Nelson, Ph.D.: *protein chemistry, bioinorganic*

David L. Thurlow, Ph.D.: *molecular biology*

Mark M. Turnbull, Ph.D.: *organometallic, magnetochemistry*

Research Professor

Paul T. Inglefield, Ph.D.: *NMR spectroscopy, polymer*

Adjunct Faculty

Christopher P. Landee, Ph.D.: *physics*

Timothy A. Lyerla, Ph.D.: *somatic cell genetics*

Affiliate Faculty

David Kupfer, Ph.D.

William Royer, Ph.D.

Emeritus

Harry C. Allen Jr., Ph.D.

Edward N. Trachtenberg, Ph.D.

Wen-Yang Wen, Ph.D.

Undergraduate Program

The department offers an undergraduate program with the following goals in mind:

1. To provide a variety of course offerings that are consistent with the accreditation requirements of the American Chemical Society;
2. To offer a program that will prepare students for graduate work in chemistry and related fields;

3. To provide a strong scientific background for students planning careers in health-related professions;
4. To encourage students not majoring in science to obtain an overview of the impact of science on society

The department offers two tracks leading to a BA in Chemistry. The requirements for the two tracks are designed to allow students to choose their course work depending upon their ultimate career goals. The requirements for the tracks (Standard and ACS-Certified) are:

All students in either track must complete two courses in calculus (either Math 120 and 121, or Math 124 and 125) and two courses in Physics (either Physics 110 and 111, or preferably Physics 120 and 121).

In addition:

ACS-Certified Track

Students must complete 11 courses in chemistry, including:

- Introductory Chemistry I (101)
- Introductory Chemistry II (102)
- Organic Chemistry I (131)
- Organic Chemistry II (132)
- Environmental Chemistry (142) or Bioanalytical Chemistry (144)
- Instrumental Analysis (246)
- Inorganic Chemistry (250)
- Physical Chemistry I (260)
- Physical Chemistry II (262) or Biophysical Chemistry (264)

The remaining two-course requirement is normally satisfied by advanced chemistry courses, one of which may be Directed Research or Honors. One of these electives must be Biochemistry, or the student must have taken Bioanalytical Chemistry and Biophysical Chemistry. On rare occasions, with advanced permission from the department, the student may substitute one advanced-level course in computer science, mathematics, physics, or biology.

Standard Track

Students must complete 10 courses in chemistry including:

- Introductory Chemistry I (101)
- Introductory Chemistry II (102)
- Organic Chemistry I (131)
- Organic Chemistry II (132)
- Environmental Chemistry (142) or Bioanalytical Chemistry (144)
- One semester of Physical Chemistry I (either 260, 262 or 264)

The remaining four courses must be advanced level chemistry courses (200 or higher) and at least two of them must have laboratory sections. One course may be Directed Research.

The ACS-Certified track is recommended for those students with a strong interest in chemistry and a desire to continue to a profession in the chemical sciences, and meets the entrance requirements for graduate study in chemistry. The standard track offers more latitude in course selection and is appropriate for those students with an interest in chemistry, but who plan to continue in one of the health professions (medical, dental, or veterinary school), public school teaching, technical sales, etc...

The requirements for the first two years are identical, so students do not need to make a final decision on which track to follow until the end of their sophomore year, but we encourage you to discuss your career plans with members of the department early to permit you to make the most appropriate choice.

A student may elect as his/her first course in chemistry : Chemistry 10, 70, 80 101, 102, or 131. Science majors normally begin with Chemistry 101. The decision to begin with either Chemistry 102 or 131 must be made in consultation with the department and may require taking a placement examination offered at the beginning of each semester. The department encourages students with two or more years of high school chemistry to consider this

option as it allows time for additional electives in the junior and senior years. The department publishes an undergraduate handbook, Chemistry at Clark, which provides additional information. Copies are available in the department office.

Students planning graduate study in chemistry are strongly urged to take Chemistry 370, 231, and/or additional advanced courses in mathematics, physics, and biochemistry. All majors are encouraged to undertake independent research projects as a candidate for Honors, Directed Research, or through one of the departments summer research fellowships, and are eligible to do so following completion of Chemistry 102.

Honors Program

An honors degree program is offered for highly qualified and motivated majors. Students who want to enter this program must apply in writing to the department chairman prior to the beginning of their senior year. Participants are required to engage in an independent research project, participate in the department seminar program and pass a set of comprehensive examinations. Further information about the program can be obtained from the department chairman, or the undergraduate handbook

Minor in Chemistry

The requirements for a minor in Chemistry are Introductory Chemistry I and II (101 and 102)

Organic Chemistry I and II (131 and 132)

Two additional courses in chemistry (numbered higher than 132) neither of which may be used to satisfy requirements for other majors, minors or concentrations.

Five Year BA/MA Program

The department offers an M.A. degree in Chemistry (focusing on Biochemistry, Organic, Environmental, Physical, Inorganic, or Analytical Chemistry) to undergraduate chemistry or biochemistry majors who complete an

additional four courses and submit an acceptable thesis based on original research. Details of the program are available from the department office.

Graduate Program

The department offers programs leading to the degrees of master of arts and doctor of philosophy with specialization in various fields of chemistry. Emphasis is placed on tailoring programs to fit the specific needs and desires of the graduate student. To facilitate this goal, a committee of interested faculty works with each student to advise and review his/her progress in research work, and together with the student, defines the formal course work requirements. Up to one year's equivalent of teaching apprenticeship will be required of all candidates for advanced degrees. In addition to formal course work, all students must pass qualifying examinations and submit and defend a research thesis.

Ph.D. candidates must pass preliminary examinations and meet the department language requirement. For further details, students should consult the appropriate departmental publications. Graduate scholarships, teaching assistantships and research fellowships are available.

Courses

010 TOPICS IN CONTEMPORARY CHEMISTRY/LECTURE, LABORATORY

This course is designed for students majoring in a social science or the humanities and is intended to develop a qualitative feeling about chemistry as it relates to the modern world. Approximately half the course is concerned with the development of modern chemical concepts; the remainder deals with current societal problems such as nuclear weapons and reactors, air and water quality, drugs, food additives, polymers, poisons and others. In-class and final exams. Staff/Offered every year.

070 PRESERVING GENOMES/LECTURE, LABORATORY/FIRST-YEAR SEMINAR

This laboratory-oriented course is offered as a first-year seminar. DNA will be isolated from endangered, rare, or exotic organisms selected by the students. The DNA will be cut into fragments and “cloned” using techniques involving recombinant DNA. As a result, the genes from the organism will be preserved as a library of fragments of DNA that are maintained in a population of bacteria. The “genomic library” will be submitted to a national repository, thereby preserving the genes of the endangered species. No prerequisites; students are invited to share in the excitement of preserving genes that might otherwise be lost forever. Laboratory reports, in-class and final exams. Dr. Thurlow/Offered every other year.

080 INTRODUCTION TO ENVIRONMENTAL CHEMISTRY

Focuses on three major areas of environmental concern: natural waters, soils and the atmosphere. Topics to be discussed will include: the nature of the solid-water interface in natural systems, trace metals in the environment, the chemistry and geochemistry of natural organic matter, the dynamic behavior of organic contaminants in natural waters, microbiologically mediated reactions in aquatic systems, oxidant formation in the troposphere, the stratospheric aerosol and its impact on stratospheric chemistry, metal-phytoplankton interactions in marine systems, atmosphere-water-rock interactions, and passive bio-remediation of metals and inorganic contaminants. The laboratory phase focuses on sample collection and handling of environmental samples, the essentials of analysis of trace heavy metals, organics and dissolved gases in natural waters, and the analysis of metals and organics in solids and atmospheric samples. In lab, students will be introduced to many of the techniques now widely used in the analysis of environmental samples, including titrimetric methods, electrode methods, spectroscopic methods (UV-VIS, fluorometric), and chromatographic methods (gas chromatographic-mass spectrometric). Dr. Nelson

101 INTRODUCTORY CHEMISTRY I/LECTURE, LABORATORY

Designed to meet the needs of science majors and the pre-health program as well as those seeking a rigorous introduction to chemistry as part of their liberal arts education. Introduces fundamental chemical concepts and applies them to a discussion of structure, bonding, and reactivity of molecules. Knowledge of high school algebra is necessary; high school chemistry and physics are helpful, but not required. The laboratory teaches techniques of chemical experimentation and methods of chemical analysis. In-class and final exams, laboratory reports, and quizzes. Staff/Offered every year.

101.2 “WHY DOES IT DO THAT?”/FIRST-YEAR SEMINAR

Hands on demonstrations and laboratory exercises, together with a detailed analysis of key experiments in the historical development of our understanding of chemistry, will be used to introduce topics normally covered in introductory chemistry lectures. “Practical” applications—such as the preparation of contact explosives and pyrophoric materials—will be used to illustrate chemical principles, including measurements, atomic and molecular theory, moles, aqueous reactions, electronic configuration, bonding, thermochemistry, behavior of gases, and intermolecular forces. Students will discover chemistry by doing chemistry. Students will engage in experiments that answer such questions as: How do we know that atoms contain electrons and protons? How many atoms are in a mole? How can we tell if water contains heavy metals? How can we measure the pressure of butane gas in a cigarette lighter? and Why do balloons filled with hydrogen explode? Lecture and laboratory. Exams, laboratory reports, and class presentations. Fulfills the science perspective. Mr. Turnbull/Offered periodically

102.1 INTRODUCTORY CHEMISTRY II/ LECTURE, LABORATORY

Continues Chemistry 101 with a discussion of thermodynamics, equilibrium theory, kinetics, electrochemistry, and the application of such

theories to studies of structure and reactivity of molecules. The laboratory studies experimental techniques related to the lecture material. Prerequisite: Chemistry 101 or advanced placement. In-class and final exams, laboratory reports, and quizzes. Staff/Offered every year.

102.2 INTRODUCTORY CHEMISTRY II, HONORS/LECTURE, LABORATORY

Continues Chemistry 101 on an advanced (honors) level. The materials covered include solution theory, chemical kinetics, equilibrium theory, thermodynamics, electrochemistry, and nuclear chemistry for understanding the general principles underlying many chemical processes in the laboratory and in the environment. The laboratory studies effects related to the lecture. Prerequisite: Chemistry 101 and permission of the 101 instructor. In-class and final exams, laboratory reports, and quizzes. Staff/Offered every year.

131 ORGANIC CHEMISTRY I/LECTURE, LABORATORY

Discusses the chemistry of carbon and its compounds. The structures and reactions of related classes of organic molecules are systematically studied with emphasis on reaction mechanism and structural factors that affect reactivity. The laboratory concentrates on the preparation and physical, spectroscopic, and chemical properties of these classes of compounds. Prerequisite: Chemistry 102 or advanced placement. In-class and final exams, laboratory reports. Dr. Erickson, Dr. Turnbull/Offered every year.

132 ORGANIC CHEMISTRY II/LECTURE, LABORATORY

Continues Chemistry 131.

142 ENVIRONMENTAL CHEMISTRY/LECTURE, LABORATORY

Focuses on chemistry related to environmental problems, with emphasis on aquatic chemistry and aquatic and air pollution. Equilibrium theory is developed as a model for aquatic chemistry, and chemical analyses of local aquatic systems are conducted in the laboratory

according to EPA procedures. Prerequisite: Chemistry 102 or advanced placement. In-class and final exams, laboratory reports. Dr. Nelson/Offered every year.

144 BIOANALYTICAL CHEMISTRY/LECTURE, LABORATORY

This laboratory-oriented course presents both theoretical and practical aspects of quantitative analysis in biological systems. Topics include: equilibrium theory, chromatography, electrophoresis, immunochemistry, ultracentrifugation, absorption and fluorescence, NMR, enzyme analyses, and radioactivity counting procedures. Prerequisite: Chemistry 132. In-class and final exams, laboratory reports. Dr. Nelson/Offered every year.

222/322 THERMODYNAMICS/LECTURE

Discusses application of the three laws of thermodynamics to chemical systems. Staff/Offered periodically.

223/323 STATISTICAL MECHANICS/LECTURE

Statistical mechanics is treated as a connecting bridge between molecular properties and thermodynamics. In addition, theories of phase transitions, classical fluids and non-equilibrium systems are presented and discussed. Staff/Offered periodically.

228 MOLECULAR GENETICS/LECTURE

See Biochem 228. Dr. Thurlow/Offered every year

231/331 ADVANCED ORGANIC CHEMISTRY/LECTURE

Provides a framework for students who wish to pursue an interest in organic chemistry beyond the level covered in Chemistry 131/132 by bridging the gap between material in standard elementary organic texts and the original literature. Advanced topics selected from structure, synthesis, and reaction mechanisms may include stereochemistry and asymmetric synthesis; ionic, free radical, carbenoid, and concerted reaction mechanisms; structure determination by modern spectroscopic and degradative methods. Prerequisite: Chemistry 132. Dr. Erickson/Offered every other year.

233/333 SYNTHETIC ORGANIC CHEMISTRY/LECTURE

The synthesis of organic compounds is discussed. Topics include the scope and limitations of general methods, mechanistic aspects and stereochemistry. Special emphasis is placed on the total synthesis of complex molecules from design of methods to execution.

Prerequisite: Chemistry 231 or permission.

Dr. Turnbull/Offered every other year.

235/335 NATURAL PRODUCTS/LECTURE

The structure, synthesis, biosynthesis and chemistry of selected secondary metabolites including steroids, terpenoids, alkaloids, and actogenins of both terrestrial and marine origin are discussed. Biogenetic theory is used extensively to emphasize the simplicity within the complexity of those natural products.

Prerequisite: Chemistry 132. Dr. Erickson/

Offered every other year

236/336 ORGANOMETALLIC CHEMISTRY/LECTURE

Covers material related to compounds containing one or more covalent metal-carbon bonds.

The material progresses from the traditional organometallics such as Grignards and cuprates through the transition metal and main group complexes. Emphasis is placed on the properties of organometallic compounds and mechanisms of their formation and subsequent reactions.

Because of the continuing development of the field, use of the primary literature is stressed.

A comparison of traditional organic and inorganic chemistry is developed through this intermediate field. Prerequisite: Chemistry 132 and 250, or permission of the instructor.

Dr. Turnbull/Offered every other year.

242/342 NUCLEAR SCIENCE/LECTURE, LABORATORY

Covers the fundamentals of nuclear chemistry and physics: production, isolation, identification, structure, and measurement of radioactive atoms. Prerequisite: permission of the instructor. Dr. Brenner/Offered periodically.

244/344 ENVIRONMENTAL CHEMICAL TOXICOLOGY/LECTURE, LABORATORY

Provides a thorough investigation of the chemical properties of molecules to explain their

effects on human health and the natural environment. The contaminants include molecules from the classes of hydrocarbons, pesticides, organometallics, and detergents. Typical degradation and transformation processes in both biotic and abiotic environments will be discussed. Diffusion of contaminants across living tissue and the measures of their adverse effects will be defined. Distribution of contaminants into the air, water, soil, and sedimentation will be modeled using two-phase partition processes. The two-phase partitioning will be used to calculate concentrations of a contaminant in each environmental section. Ms. Murphy/Offered every year

246/346 INSTRUMENTAL ANALYSIS/LECTURE, LABORATORY

Concentrates on instrumental techniques of analytical chemistry from both theoretical and practical points of view. Topics include electrochemistry, various types of spectroscopic analysis, chromatography, and electrophoresis. In the laboratory, these techniques are used in the analysis of chemical samples. Prerequisite: Chemistry 142 or 144. In-class and final exams, laboratory reports. Staff/Offered every year.

250/350 INORGANIC CHEMISTRY/LECTURE, LABORATORY

Deal with theories of structure and bonding and their utility in explaining the chemistry of inorganic substances. Topics include: molecular orbital, valence bond, and crystal field theories of bonding and examples of the use of theories in explaining the structure and reactivities of inorganic molecules; acid base theory; spectroscopic methods; and kinetics.

Emphasis is placed on the interpretation of structure and reactivity in terms of basic molecular and atomic parameters, and on reaction pathways. Prerequisite: Chemistry 132, and 142 or 144. Dr. Turnbull/Offered every year

260/360 PHYSICAL CHEMISTRY/LECTURE, LABORATORY

Covers basic principles of quantum mechanics and their application for understanding fundamental aspects of atomic structure and molecu-

lar bonding. Requires a good working knowledge of calculus (entrance exam). The laboratory includes experiments in general physical chemistry. Prerequisite: Math 120 or 125 and Chemistry 132. Staff/Offered every year.

261/361 MAGNETIC RESONANCE THEORY/LECTURE

The theory of static and time-dependent interactions involved in magnetic resonance spectroscopy is presented. Energy states are defined on the basis of the time-independent Hamiltonian and reflect symmetry. The time-dependent terms in the Hamiltonian are used to develop descriptions for line shape collapse and relaxation. Prerequisite: Chemistry 262 or 264. Dr. Jones/Offered every other year.

262/362 PHYSICAL CHEMISTRY II/LECTURE, LABORATORY

Continues Chemistry 260 covering fundamental aspects of physical chemistry from a molecular perspective. Topics that are covered include Boltzmann's law, statistical mechanics, thermodynamics, phase equilibria, ideal and non-ideal solutions, chemical equilibrium, chemical kinetics, and molecular spectroscopy. Prerequisite: Chemistry 260. Staff/Offered every year.

264/364 BIOPHYSICAL CHEMISTRY/LECTURE, LABORATORY

See Biochemistry 264. Dr. Nelson/Offered every other year.

266/366 BIOMOLECULAR NMR/LECTURE

Covers theory and application of multi-dimensional nuclear magnetic resonance (NMR) spectroscopy for the study of structure and dynamics of proteins in solution. The course starts with a classical description of spin magnetization and its time evolution under a static magnetic field and radio-frequency pulses leading to the discussion of one-dimensional NMR techniques. For the proper inclusion of scalar J-coupling effects a quantum-mechanical treatment in form of the product operator formalism is introduced. The extension of these concepts to multiple dimensions is discussed in detail including NOESY, COSY, TOCSY, HSQC, and related experiments. Basic spin

relaxation theory is presented and its specific use is demonstrated to gain detailed information on protein dynamics. On request, principles of quantum-information processing including quantum computing using NMR will be treated. The course assumes a basic knowledge of classical mechanics and quantum mechanics. Dr. Bruschweiler/Offered periodically.

270/370 QUANTUM CHEMISTRY/LECTURE

An introduction to quantum mechanics. Covers elementary quantum-mechanical treatments of the structure of atoms and molecules. Prerequisite: Chemistry 262 or 264. Dr. Brenner/Offered every other year.

271/371 BIOCHEMISTRY I/LECTURE, LABORATORY

272/372 BIOCHEMISTRY II/LECTURE

See Biochemistry 271 and 272. Dr. Nelson, Dr. Thackery, Dr. Thurlow/Offered every year.

281/381 POLYMER SCIENCE/LECTURE

The physical chemistry of synthetic polymers is presented, including discussion of kinetic mechanisms of polymerization, molecular weight distributions, unperturbed dimensions, structure and conformation, viscosity, and dynamic properties. Specific experimental methods useful in polymer chemistry such as osmotic pressure, light scattering, gel permeation chromatography, viscoelastic response, NMR, and dielectric response also are reviewed. Prerequisite: Chemistry 262 or 264. Dr. Jones/Offered periodically.

289 RESEARCH METHODS/LECTURE, LABORATORY

Deals with the application of analytical tools widely used in the laboratory. Topics include NMR, EPR, IR, Raman, UV-visible, mass, and fluorescence spectroscopy, chromatography, electrophoresis, electrochemistry, and other techniques. Emphasizes practical knowledge for data interpretation and instrument operation. Quarter-credit courses lasting 4-5 weeks are offered periodically. Prerequisite: Chemistry 262 or 264, or permission. Staff.

297 HONORS

Primarily for majors seeking departmental honors in chemistry. Involves a laboratory research project and participation in depart-

ment seminars. Offered for variable credit.
Prerequisite: Permission of the department chairman. Staff/Offered every semester.

299 DIRECTED STUDY

Individual investigations that involve laboratory and literature research. Offered for variable credit. Prerequisite: Permission. Staff/Offered every semester.

380 RESEARCH CONFERENCE/SEMINAR

Consists of reports on research and discussions of recently published work. Guest lectures, staff, graduate students/Offered every semester.

399 INDEPENDENT STUDY

Offered for variable credit. Staff/Offered every semester.

COMMUNICATION AND CULTURE

Participating Faculty

Fern Johnson, Ph.D., *program director, English: sociolinguistics, feminist linguistics, cultural foundations of communication, language in media*

Gauvin Bailey, Ph.D., *Visual and Performing Arts: Renaissance and Baroque Art; Asian Art; Lating American Art*

Michael Bamberg, Ph.D., *Psychology: language acquisition, narratives, discourse analysis, identity development, construction of masculinity*

Marcia Butzel, Ph.D., *Visual and Performing Arts: film criticism, theory and history; gender and film, comparative arts*

Parminder Bhachu, Ph.D., *Sociology: urban anthropology, popular cultural forms, cultural production, transnational diaspora cultures, immigration and new markets*

Martyn Bowden, Ph.D., *Geography: Cultural humanistic and historical/urban/social geography*

Nancy Budwig, Ph.D., *Psychology: language development, discursive psychology, socialization*

Eric Gordy, Ph.D., *Sociology: sociological theory, sociology of culture, media and music, political and historical sociology, Balkan societies*

Matthew Malsky, Ph.D., *Visual and Performing Arts: composer, electronic music and multimedia*

Sarah Michaels, Ph.D., *Education: relationships among language, discourse, culture and schooling; teacher research*

Timothy Shary, Ph.D., *Screen Studies: American Cinema, film genre, television studies*

Rhys Townsend, Ph.D., *Visual and Performing Arts: ancient art and archaeology, material culture*

Jaan Valsiner, Ph.D., *Psychology: cultural psychology and history of ideas*

Program

The Communication and Culture major is designed to emphasize inquiry into the cultural foundations of communication in its various forms. Focused mainly on critical analysis of communication, the major provides students with a liberal arts perspective on the role that various forms of communication play in creating, representing, and influencing cultural practice. Through an interdisciplinary approach involving faculty from different fields of expertise in the humanities and social sciences, students study media, discourse and communication processes, and global influences and developments in communication. The curriculum covers both historical and current topics, and the range of communicative forms considered includes visual and graphic images, everyday discourse, literary and journalistic works, music, and material productions. Although not a production or pre-professional major, students have opportunities for practicum and internship learning.

For details about the major, students should consult the Majors' Handbook, which is available on-line, in the Communication and Culture Program Office, and at the Academic Advising Center.

The curriculum is organized into two clusters: Discourse and Cultural Studies and Visual Media and Nonverbal Communication.

The major includes a number of courses focused on Global Dimensions of communication. These courses are marked with a "G" in the course listing, and students are strongly encouraged to select from these offerings.

Requirements for the Major (11 units minimum)

I. Foundation Courses

COMM 101: Communication and Culture 1 unit

II. Anchor Seminars (2 courses) 1 unit

COMM 150: Anchor Seminar in Discourse and Cultural Studies

COMM 151: Anchor Seminar in Visual Media and Nonverbal Communication or (approved substitute)

III. Cluster Courses (minimum of 5) 5 units

At least 2 courses in each cluster:

“Discourse and Cultural Studies,” “Visual Media and Nonverbal Communication

- a minimum of 2 and a maximum of 4 cluster courses are to be practicum-based
- a minimum of 3 of the cluster courses must be at the 200-level

IV. Integrative Seminar (200-level) 1 unit

courses fulfilling this requirement are designated each semester

V. Internship or Project 1-2 units

VI. Capstone 1-2 units

Students must complete COMM 101 before taking the anchor seminar, and at least one anchor seminar must be taken before the integrated seminar.

Course prerequisites are listed for specific courses and may be different for Communication and Culture majors than for students taking the course in the department from which it is cross-listed. Students should consult semester schedules carefully to determine prerequisites.

Students must earn a grade of C or better in all courses contributing to the major program of study.

For more information about the COMM major, call 508-793-7180.

Requirements for a Minor

The minor in Communication and Culture is designed to provide concentrated study in one of the two clusters. The minor requires at least six courses as follows.

1. COMM 101

2. Five additional courses selected from either Cluster 1: Discourse and Cultural Studies or Cluster 2: Visual Media and Nonverbal Communication as listed in the catalog. (you need to chose one cluster or the other not both)

- No more than three may be designated “practicum based” courses
- At least two must be at the 200-level

Integrative Seminars

The integrative seminars are courses at the 200-level that treat a particular topic through different disciplinary perspectives or that bring together two or more topics from different domains of communication and cultural analysis. These seminars are listed separately below. At least one Integrative Seminar is offered each semester, and new topics may be added. Interested students may petition the Director of the program to substitute a second integrative seminar for an elective course.

Integrative Seminar Courses

216 ARCHITECTURE & DEMOCRACY

See Art History 216. Mr. Townsend/Offered every other year

230 SOCIOLOGY OF CULTURE

See Sociology 231. Mr. Gordy/Offered other year

234 CONVERGING CULTURES IN THE AGE OF DISCOVERY

See Art History 232. Mr. Bailey/Offered periodically

240 END OF AMERICA: LA

See Geography 240. Mr. Bowden/Offered every other year

247 THEORETICAL MODELS OF COMMUNICATION IN PSYCHOLOGY

See Psychology 247. Mr. Valsiner/Offered periodically

251 LANGUAGE DEVELOPMENT

See Psychology 251. Ms. Budwig/Offered every year

253 NARRATIVE DISCOURSE

See Psychology 253. Ms. Budwig/Offered periodically

257 LANGUAGE AT ISSUE

See English 257. Ms. Johnson/Offered every other year

275 CULTURE, CONSUMPTION, & CLASS IN LOCAL & GLOBAL CONTEXTS

See Sociology 250. Ms. Bhachu/Offered every other year

Senior Capstone

The Senior Capstone in Communication and Culture requires that the student participate in original research or creative activity or produce an individual project related to some aspect of her or his Path emphasis. At the end of the junior year, majors receive information about options available for the senior capstone.

Based on this information, each student selects one of the seniors capstone seminars, proposes an independent study project, or, if qualified, proposes an honors thesis project. All projects and theses must be supervised by a member of the Communication and Culture faculty. For honors theses, a second faculty member who will serve as an evaluator is selected through a consultation process between the student and his or her thesis advisor.

Courses that have been offered as Capstone Seminars are identified in the course listings. New courses are added from time to time. Note that a student who takes a designated capstone seminar earlier than the senior year may count this course toward major elective requirements but may not use the course to fulfill the capstone requirement.

Senior Capstone Course

273 EFFECTS OF MASS MEDIA

See Sociology 273. Mr. Gordy/Offered every other year

274 NEW MEDIA THEORY & PRACTICE

See Music 200. Mr. Malsky/Offered periodically

276 ADVANCED TOPICS IN CULTURAL PSYCHOLOGY (TOPIC DEPENDENT)

See Psychology 276. Mr. Valsiner/Offered periodically

285 FILM AS NARRATION

See Screen Studies 284. Ms. Butzel/Offered every other year

288 GENDER & FILM

See Screen Studies 288. Ms. Butzel/Offered every other year

290 ADVANCED TOPICS: FILM GENRE

See Screen Studies 289. Staff/Offered every

294 GLOBAL ETHNOGRAPHIES

See Sociology 294. Ms. Bhachu/Offered periodically

295 GENDER AND DISCOURSE

See English 295. Ms. Johnson/Offered every other year

Courses

I. Introductory Course

101 COMMUNICATION AND CULTURE

Examines the ways in which communication creates and represents ideology, social orders, and cultural identities. Emphasis is on critical analysis of communication in contemporary society. Subjects vary, with emphasis on the cultural dimensions of discourse and media. Ms. Johnson/Mr. Malsky/Offered every year

II. CLUSTER 1: DISCOURSE AND CULTURAL STUDIES

Focuses on the many ways in which discourse constructs culture. Analyzes language as a system of communication, considers the cultural dimension of communication, and also provides practical experience in written and spoken discourse.

Required

150 ANCHOR SEMINAR: DISCOURSE AND CULTURAL STUDIES

The anchor seminar for the Discourse and Cultural Studies Cluster studies the nature of human communication-both in language and other sign systems (e.g., cultural artifacts, media, and social interactions)-within and across diverse cultures and social institutions. It focuses on tools for analyzing communication in context with reference to its psychological, social, cultural, and political implications. Ms. Michaels, Staff/Offered every year

Electives in Cluster 1

017 CULTURE, PLACE & THE ENVIRONMENT/ "G"

See Geography 017. Mr. Bowden/Offered every year

020 TRANSFORMATIVE SCHOOLING: CULTURE, COMMUNITY, EDUCATION & SOCIETY

See EDUC 112. Ms. Michaels/Offered every year

105 NEWS WRITING WORKSHOP*

See English 105. Staff/Offered every year

106 CREATIVE WRITING: FICTION*

See English 106. Staff/Offered every year

107 CREATIVE WRITING: POETRY*

See English 107. Staff/Offered every year

121 SHAKESPEARE RECYCLED

See English 121. Ms. Vaughan/Offered every year

130 THE NATIONAL IMAGINATION

See Comparative Literature 130. Staff/Offered every year

137 GENDER, SPACE, AND ENVIRONMENT/ "G"

See Geography 136. Ms. Rocheleau/Offered every year

138 STUDIES IN CONTEMPORARY FRENCH CULTURE/ "G"

See French 147. Ms. Kaufmann/Offered every other year

142 CITIES & CULTURE: THE AMERICAN CITY/ "G"

See Geography 142. Mr. Bowden/Offered every year

156 CULTURAL PSYCHOLOGY/ "G"

See Psychology 156. Mr. Valsiner/Offered every year

158 DISCOURSE, SUBJECTIVITY, AND THE SELF

See Psychology 158. Mr. Bamberg/Offered periodically

160 CULTURAL IDENTITIES AND GLOBAL PROCESSES/ "G"

See Sociology 161. Ms. Bhachu/Offered every year

162 LANGUAGE, EMOTION, THOUGHT, & CULTURE

See Psychology 160. Ms. Budwig/Offered periodically

194 CULTURE AND SPORT/ "G"

See Geography 196. Mr. Bowden/Offered every other year

195 PSYCHOLOGY, COMMUNICATION, AND THE SELF

See Psychology 193. Mr. Bamberg/Offered every year

196 ORAL ADVOCACY*

See English 196. Ms. Johnson/Offered every other year

202 FEATURE WRITING I*

See English 202. Staff/Offered every year

203 FEATURE WRITING II*

See English 203. Staff/Offered every year

205 CULTURE AND THE NEWS

See English 205. Staff/Offered periodically

211 AMERICAN CONSUMER CULTURE

See History 211. Ms. Richter/Offered every other year

215 LANGUAGE & CULTURE IN THE U.S.

See English 215. Ms. Johnson/Offered every year

241 CITIES & CULTURES: THE EUROPEAN CITY/ "G"

See Geography 242. Mr. Bowden/Offered every other year

242 PHILOSOPHY OF LANGUAGE

See Philosophy 242. Mr. Pakaluk, Mr. Hendricks/Offered periodically

248 SIGNS/CROSSROADS: SEMIOTICS

See English 249. Ms. Gertz/Offered every year

249 THE FRENCH-SPEAKING WORLD/ "G"

See French 249. Ms. Kaufmann/Offered periodically

259 AMERICAN WEST AS IMAGE, SYMBOL, AND MYTH

See Geography 259. Mr. Bowden/Offered every other year

268 COMMUNICATIVE DEVELOPMENT

See Psychology 268. Ms. Budwig/Offered periodically

280 EARLY AMERICAN POP CULTURE

See English 280. Ms. Roberts/Offered every other year

II. Cluster 2: Visual Media and Nonverbal Communication

This cluster explores media that are not fundamentally language-based. Analyzes and explores media whose creation and meaning emphasizes sight or sound and mediated systems that engage combinations of the senses. Considers the cultural and social contexts in which visual media and nonverbal communication are created and interpreted.

Required**151 VISUAL MEDIA AND NONVERBAL COMMUNICATION**

Examines means by which society creates and transmits cultural beliefs through forms of nonverbal communication. Studies how tangible artifacts,, ranging from clocks to computers, reveal the ideas, assumptions, and values of the people who make them. Students will explore ways to make use of such artifacts responsibly and creatively in a media-driven society. Ms. Butzel, Staff/Offered every year

Electives in Cluster 2**010 FROM THE STONE AGE TO OUR AGE: MONUMENTS AND MASTERPIECES OF WESTERN ART/LECTURE, DISCUSSION**

See Art History 010. Staff/Offered every year

011 INTRODUCTION TO MUSIC

See Music 010. Staff/Offered every semester

013 POP MUSIC IN USA

See Music 012. Mr. Malsky/Offered periodically

012 MUSIC AS CULTURE

See Music 011. Staff/Offered every year

100 VISUAL STUDIES: 2 D DESIGN AND COLOR*

See Studio Art 100. Staff/Offered every year

102 VISUAL STUDIES: DRAWING*

See Studio Art 102. Staff/Offered every year

103 INTRO TO SCREEN STUDIES

See Screen Studies 010. Ms. Butzel, Staff/Offered every semester

108 TWENTIETH-CENTURY MUSIC

See Music 103. Mr. Malsky/Offered every year

117 FACTUAL FILM & TELEVISION

See Screen Studies 123. Mr. Shary /Offered periodically

118 HISTORY OF AMERICAN BROADCASTING & ELECTRONIC MEDIA

See Screen Studies 122. Staff/Offered every other year

119 AMERICAN FILM: ORIGINS-WWII

See Screen Studies 119. Staff/Offered every other year

120 INTRODUCTION TO PHOTOGRAPHY*

See Studio Arts 120. Mr. Rosenstock, Mr. DiRado/Offered every semester

123 INTERMEDIATE PHOTOGRAPHY*

See Studio Arts 121. Mr. Rosenstock, Mr. DiRado/Offered every semester

124 INTRODUCTION TO GRAPHIC DESIGN*

See Studio Arts 124. Ms. Buie, Ms. Bodenweber/Offered every year

125 GRAPHIC DESIGN PROJECTS*

See Studio Arts. Ms. Bodenweber/Offered every year

126 SURVEY OF INTERNATIONAL FILM MOVEMENTS/ "G"

See Screen Studies 121. Staff/Offered every other year

128 AMERICAN FILM: SINCE WWII

See Screen Studies 120. Staff/Offered every other year

135 MEDIA AND SOCIETY

See Sociology 135. Mr. Gordy/Offered every year

141 FILM AUTHORS AND AUTHORSHIP

See Screen Studies 140. Ms. Butzel,
Mr. D'Lugo/Offered every other year

143 INTERACTIVE COMPUTER MUSIC

See Music 141. Mr. Malsky/Offered every year

159 LATIN AMERICAN ART/ "G"

See Art History 159. Mr. Bailey/Offered
periodically

161 CRITICAL PERSPECTIVES ON T.V. CULTURE

See Screen Studies 161. Mr. Shary/Offered
periodically

164 THE ARTS OF ASIA/ "G"

See Art History 160. Mr. Bailey/Offered every
other year

165 THE ARTS OF ISLAM/ "G"

See Art History 161. Mr. Bailey/Offered every
other year

167 INTRODUCTION TO VIDEO PRODUCTION*

See Screen Studies 107. Mr. Simon/Offered
every semester

171 STORYTELLING THROUGH VIDEO*

See Screen Studies 171. Mr. Simon/Offered
every year

207 DIGITAL EDITING/PRODUCTION IN VIDEO

See Screen Studies 207. Mr. Simon/Offered
every year

208 TYPOGRAPHY*

See Studio Arts 208. Ms. Buie/Offered every
year

209 INTRO TO INTERACTIVE DESIGN*

See Studio Arts 209. Mr. Quarkenbush/Offered
every year

212 ACTOR AS THINKER*

See Theatre Arts 212. Mr. Munro/Offered
every other year

250 PHOTOGRAPHY STUDIO*

See Studio Arts 250. Staff/Offered every year

254 GRAPHIC DESIGN STUDIO*

See Studio Arts 254. Ms. Buie/Offered every
year

277 VIDEO PRODUCTION STUDIO*

See Studio Arts 278. Mr. Simon/Offered

COMPARATIVE LITERATURE

Participating Faculty

Kenneth Hughes, Ph.D., *program director:*
18th- to 20th-century European and American
literature, literary theory

Paul F. Burke Jr., Ph.D.: *Greek and Latin*
language and literature, classical mythology,
classical art and archaeology

Marvin A. D'Lugo, Ph.D.: *Hispanic literature*
and film, narrative theory

William Ferguson, Ph.D.: *Spanish Golden Age*
literature, 20th-century Hispanic literature

Everett Fox, Ph.D.: *Jewish ritual and folklore,*
Classical Jewish thought

Beth W. Gale, Ph.D.: *19th- and 20th- century*
French literature, women and the novel, cultural
studies

Dorothy Kaufmann, Ph.D.: *French feminism,*
literature and existentialism, French and
Francophone cultural studies, European novel

Walter Schatzberg, Ph.D.: *age of Goethe,*
German expressionism in literature and the arts,
German cinema, relations of literature and science

Michael K. Spingler, Ph.D.: *French theater*
and film, comparative drama, translation

Adjunct Faculty

Martyn J. Bowden, Ph.D.

Marcia Butzel, Ph.D.

John Conron, Ph.D.

SunHee Kim Gertz, Ph.D.

Undergraduate Program

Comparative Literature is a wide-ranging, multicultural program of studies in poetry, prose, drama, film, and related arts. Housed in the Department of Foreign Languages and Literatures, the program is by nature interdisciplinary and has strong ties with other departments in the University. In addition to the courses offered by the department in comparative literature and literatures in foreign languages, the student is encouraged to take courses in English, history, philosophy, and visual and performing arts. One of the special aspects of the program is the emphasis on developing a practical and critical approach to texts. This may take the form of play production, seminars

in translation of lyric poetry and drama, and supervised work in contemporary critical theory (i.e., relations between text and performance, spectator positioning, and reader response).

Requirements

1. Four courses beyond the intermediate level in one or more foreign languages. (An intermediate-level course in a second foreign language may be used in certain cases toward the fulfillment of the language course requirement.)
2. Four courses in comparative literature, at least two of which should have a strong theoretical component.
3. Five related courses, to be selected by the student in consultation with a faculty advisor. One of these must be Comparative Literature 130, The National Imagination

Courses

117 INTRODUCTION TO THE HEBREW BIBLE I: NARRATIVE AND LAW/LECTURE, DISCUSSION

See Jewish Studies 117. Mr. Fox/Offered every year

118 INTRODUCTION TO THE HEBREW BIBLE II: PROPHECY AND POETRY/LECTURE, DISCUSSION

See Jewish Studies 118. Mr. Fox/Offered every year

120 THE EPIC JOURNEY/LECTURE, DISCUSSION

A comparative and cross-cultural examination of the epic as a recurring literary form. Special attention is paid to the various forms and functions of the hero's journey. Defines and articulates the various types of epic voyage and relates their differences and similarities to the values of the societies that gave rise to them. Included in the term's reading are selections (in English translation) from Homer's *Odyssey*, Vergil's *Aeneid*, Apollonius's *Argonautica* and Apuleius's *Ass*. Mr. Burke/Offered every other year

121 SURVEY OF INTERNATIONAL FILM MOVEMENTS/LECTURE, DISCUSSION

See Screen Studies 121. Ms. Butzel/Offered periodically

123 THE MIDRASHIC TRADITION/LECTURE, DISCUSSION

See Jewish Studies 123. Mr. Fox/Offered every other year

125 CROSSING BOUNDARIES/LECTURE, DISCUSSION

Beginning with Salman Rushdie's notion of "imaginary homeland," we will consider the questions raised by crossing boundaries: Where is home? How do writers create bridges between worlds of here and there, past and present, public and private, reality and fantasy? What is the role of language in constructing identity? How does the crossing of boundaries affect the stories of who we are? Readings will include contemporary autobiographical narratives focusing on migration and/or cultural displacement. We will explore the issues posed by these texts for students' own lives as individuals, as members of the Clark community, and as citizens of a global society. Fulfills the comparative perspective requirement. First preference for enrollment in this course will be given to students in the International Studies Stream. Ms. Kaufmann/Offered periodically

130 THE NATIONAL IMAGINATION: TOPICS IN LITERATURES AND CULTURES/LECTURE, DISCUSSION

This course explores the concept of a national community as constructed and critiqued through literary and cinematic narratives as well as other cultural texts. Special emphasis is given to the ways in which national languages have been used to promote the sense of cultural continuity and identity for various national communities. Variable content. This is a team-taught course with national focus changing depending upon the participation of particular members of the Foreign Languages faculty. Staff/Offered every year.

150 JOURNEYS WITH HYPHENATED AMERICANS: EMERGING IDENTITIES; EVOLVING CULTURES/FIRST-YEAR SEMINAR

The American "melting pot," once a national myth, has now become a cultural cliché often derided by contemporary ethnic communities. Forged largely around the migration of Europeans to the United States in the early

20th century, that fiction of national identity has since been rewritten and transformed through works that reflect the experiences of men and women who have come from non-European backgrounds: Native Americans, African Americans, Latinos, and Asian Americans. This seminar traces some of the shifts in these stories of migration in both fiction and film, in works ranging from the uplifting autobiographies of European immigrants at the beginning of the 20th century to Robert Rodriguez's irreverent Chicano movie, *Spy Kids*, at the century's end. In debunking the melting pot, writers and filmmakers have produced a highly imaginative and yet subversive counter-mythology that forces us to reconsider many of the commonplaces about American cultural identity. Fulfills the verbal expressions requirement. Mr. D'Lugo/Offered periodically

151 INTRODUCTION TO MEDIEVAL LITERATURE/LECTURE, DISCUSSION

See English 150. Ms. Gertz/Offered every year

152: LYRIC POETRY: SONGS OF THE SELF/FIRST-YEAR SEMINAR

Through a study of selected lyrical works, drawn from many different centuries and a variety of cultures, this seminar investigates the deepest roots of human self-expression, the power of metaphor, and the beauty of image-making in words. Texts are taken from the 20th-century Anglo-American tradition (Moore, Auden, Eliot, Roethke, Levertov); or from certain older English-language contexts (Wyatt, Smart, Coleridge); as far as possible, texts from non-English speaking cultures are presented both in literary translation and in the original to give the English-speaking student insight into the cadences of the other language. Students with knowledge of a foreign language are encouraged to do comparative work in that language and in English. Students write several critical essays over the semester on class-readings and individually-assigned projects. Fulfills the verbal expression requirement. First preference for enrollment will be given to students in the International

Studies Stream. Others will be admitted on a space available basis. Mr. Ferguson/Offered periodically

155 STUDIES IN ITALIAN FILM: NEOREALISM/LECTURE, DISCUSSION

Explores the political, cultural, and aesthetic role of Neorealist cinema in Italy. The linkage of film, history, and nationality during the years 1942-1951 leads to broader questions concerning the relations between art and politics in fascist, *Resistenza*, and contemporary Italian culture. In addition to film texts and selections from the critical debate over Neorealism in film and cultural history, we consider both precursors and inheritors of Neorealist cinema. Ms. Butzel/Offered every other year

160 FRENCH CULTURE SEEN THROUGH FILM: JEAN RENOIR/LECTURE DISCUSSION

See French 160. Mr. Spingler/Offered periodically

175 LITERATURE AND EXISTENTIALISM/SEMINAR

An introduction to major writers and themes of existentialism from Dostoyevsky, Kierkegaard, and Nietzsche to Sartre, Beauvoir, and Camus. Beginning with a study of the cultural origins of existentialism as a distinctively modern, European sensibility, we explore why and how existentialist thought has found expression with unique appropriateness as both philosophical literature and literary philosophy. Ms. Kaufmann/Offered periodically

180 JAPANESE CULTURE AND LITERATURE IN TRANSLATION/LECTURE, DISCUSSION

See Japanese 180. Taught in English. Ms. Valentine/Offered periodically

181 THE LITERATURE OF MODERN SPAIN IN TRANSLATION/LECTURE DISCUSSION

Readings representing the major authors and trends in the literature of Spain in the 19th and 20th centuries. Emphasizes the realist novels of Galdós and Clarín in the 19th century; the philosophical novels of Unamuno and Pérez de Ayala, poetry and theater of Lorca, and the post-modernist narratives of Goytisolo in the 20th century. Mr. D'Lugo/ Offered periodically

188 THE CULTURE OF THE WEIMAR REPUBLIC IN LITERATURE, FILM, AND THE ARTS/LECTURE, DISCUSSION

See German 188. Mr. Schatzberg/Offered periodically

205 THE PLAY AND ITS STAGES/SEMINAR, WORKSHOP

A critical approach to the dramatic text based on historical and material conditions of performance. Considers the changing ways that meanings are made through styles and conventions of performance (including set, costume, mask, and vocal delivery), which are specific to historical and cultural moments. Playwrights considered may include Sophocles, Shakespeare, Racine, Molière, Chekhov, Ibsen, Brecht, Genet, and Beckett. Scene work. Mr. Spingler/Offered periodically

206 LANGUAGES OF THEATER/SEMINAR, DISCUSSION

A study of the way meanings are made in theater through structure and sign. Examines the function of non-verbal communication in theater, especially mask, gesture, movement, and sound. Plays may include works of Euripides, Shakespeare, Cocteau, Apollinaire, Jarry, Genet, and Pinter. Critical works read include Artaud's *The Theater and its Double*, Brook's *The Empty Space*, and Grotowski's *Towards a Poor Theater*. Scene work. Crosslisted with Theater 206. May be taken as a companion course to Comparative 205. Mr. Spingler/Offered periodically

209 LITERARY RESPONSES TO THE HOLOCAUST/LECTURE, DISCUSSION

Explores the imaginative record of the Holocaust produced by both Jews and non-Jews in various cultural and national contexts. Texts are used that were originally written in Hebrew, Yiddish, English, French and Polish during and after the war. The course investigates literary attempts to represent the most chaotic and inexplicable of experiences. The course also investigates how a wide range of authors from a variety of backgrounds respond

to this immense challenge. Questions asked include: How do writers' nationalities, religions, cultures and genders inform their work? Do they draw from traditional literary and cultural conventions, or do the ghetto and concentration camp evoke a new language and structure? In examining texts written after the war in Israel and the United States, we will also examine the challenge of the Holocaust to Zionist thought, and the popularization of the Holocaust in contemporary American culture. Staff/Offered periodically

210 COMING OF AGE IN THE FRENCH NOVEL/LECTURE, DISCUSSION

See French 210. Ms. Gale/Offered periodically.

215 20TH CENTURY FRENCH AND FRANCOPHONE WOMEN WRITERS/LECTURE, DISCUSSION

Explores the major works of French fiction and theory as they question and illuminate each other in the context of the contemporary French feminist controversy between theories of equality and theories of difference. Readings include Colette, Simone de Beauvoir, Hélène Cixous, Marguerite Duras, Luce Irigaray, Monique Wittig, Julia Kristeva. Prerequisite: permission of the instructor. Ms. Kaufmann/Offered periodically

220 THE RUSSIAN NOVEL IN THE 19TH CENTURY/LECTURE, DISCUSSION

See Russian 220. Mr. Hughes/Offered periodically

225 LITERATURE AND FILM OF GERMAN-OCCUPIED FRANCE/SEMINAR, DISCUSSION

See French 225. Ms. Kaufmann/Offered periodically

240 STUDIES IN MODERN NARRATIVE FORM/LECTURE, DISCUSSION

Investigates modifications of the traditional novel form in the 20th century, changes which have enabled the novel to maintain its position as the pre-eminent literary genre. Authors studied include: Joyce, Woolf, Beckett, Thomas Mann, Robbe-Grillet, D.M. Thomas, and Doctorow. Mr. Hughes/Offered periodically

246 STUDIES IN SPANISH CINEMA/LECTURE, DISCUSSION

See Spanish 246. Conducted in English.
Mr. D'Lugo/Offered periodically

247 STUDIES IN HISPANIC CINEMA/LECTURE, DISCUSSION

See Spanish 249. Conducted in English.
Mr. D'Lugo/Offered periodically

248 STUDIES IN LATIN AMERICAN CINEMA/LECTURE, DISCUSSION

See Spanish 248. Mr. D'Lugo/Offered periodically

249 SIGNS & CROSSROADS/SEMINAR

See English 249. Ms. Gertz/Offered periodically

250 MEDIEVAL LITERATURE/SEMINAR

See English 250. Ms. Gertz/Offered every other year

254 STILL SPACES—EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM

See English 254. Ms. Gertz/Offered every year

278 MODERN POLITICAL LITERATURE: CLASS, RACE, GENDER, ETHNICITY/SEMINAR

See English 278. Mr. Sultan/Offered periodically

288 ART OF THE CITY: PARIS AND NEW YORK/ DISCUSSION

A comparative structural and cultural analysis of two urban designs, Haussmann's Paris and Olmsted's New York, the visual representation of the two cities, and the literary interpretation of the cities. The cities will be considered as theaters in which cultural meanings are produced through spatial composition and performances in the set. Among the questions to be explored is the matter of cultural kinships and differences between France and the United States. Prerequisite: Permission of either instructor. Mr. Conron, Mr. Spingler/Offered periodically

294 HISTORY OF THE ENGLISH LANGUAGE/ SEMINAR

See English 294. Ms. Gertz/Offered periodically

299 GENDER AND FILM/LECTURE, DISCUSSION

See Screen Studies 288. Ms. Butzel/Offered every other year

COMPUTER SCIENCE

Program Faculty

Jerry Breecher, Ph.D.: *performance evaluation*

Arthur Chou, Ph.D.: *algorithms, complexity theory*

Frederic Green, Ph.D.: *theory of computation, complexity theory, quantum computing*

Li Han, Ph.D.: *computer simulation, software engineering, robotics, computer animation*

David Joyce, Ph.D.: *semantics of programming languages*

Natalia Sternberg, Ph.D.: *scientific computing*

Adjunct Faculty

Harvey Gould, Ph.D.: *computer simulation*

Undergraduate Major

The department views computer science as an academic discipline firmly within Clark University's liberal arts tradition, with an emphasis on the science of designing software and hardware. Courses emphasize concepts and principles; at the same time, the program as a whole closely follows ACM guidelines for university computer science. The major provides preparation for a variety of career paths, both inside and outside the academic community. Two courses in computer programming and one course in discrete mathematics serve as general introductory courses. Four intermediate courses (core requirements) expose the fundamental principles of computer science. One year of calculus is required, and should be completed as soon as possible, if at all possible by the end of the sophomore year. Beyond this, a series of elective courses is offered, in which applications and advanced topics are explored. Further information, including expanded course descriptions, can be found on the department's World Wide Web server at <<http://mathcs.clarku.edu/>>.

Declaring a Major

The department has a system of advising to assist students with their course selections. Department faculty are eager to help students select courses. A major must be declared no later than the second semester of the sopho-

more year; earlier declarations are encouraged. Students should choose an academic advisor from the department faculty as early as possible, or at least by the time the major is declared.

Requirements for the Computer Science Major

Introductory Courses

These courses are prerequisites for the advanced courses and should be taken as soon as possible.

CSci 101 (Computer Programming I)

CSci 102 (Computer Programming II)

Math 114 (Discrete Mathematics)

Calculus

One year of calculus is required, and should be completed as soon as possible, if at all possible by the end of the sophomore year.

Math 120-121 (Calculus I and II) or Math 124-125 (Honors Calculus I and II)

Core Courses

CSci 140 Assembly Language and

Computer Organization

CSci 160 Data Structures and Algorithms

CSci 170 Analysis of Programming
Languages

CSci 180 Automata Theory

Advanced Courses

Four courses in computer science at the 200 level (not including internships or reading courses except with departmental approval) (Total 13 courses)

Suggested Program Sequence

It is important to begin the computer science program early. An ideal program sequence begins with CSci 101 (Programming I) in the fall of the first year, followed by CSci 102 (Programming II) and Math 114 (Discrete Mathematics) in the spring semester. Math 120-121 (Calculus) or Math 124-125 (Honors Calculus) should be taken in the first year if possible, and in no case later than the second year. The four core courses should be taken as soon as possible.

The three mathematics courses required for the computer science major are meant to ensure that all students will have the mathe-

matical tools which are indispensable for the study of computer science. Math 114 is a direct or indirect prerequisite for essentially all intermediate and advanced computer science courses, and should be taken as early as possible by any student who may be interested in computer science. If it is not possible for a student to take both Math 114 and Calculus during the first year, preference should be given to Math 114.

Honors Program

A major who maintains at least a 3.2 average (4.0 scale) in courses required for the major may apply for the departmental honors program. A student's application in writing must be directed to a prospective honors advisor or the department chair by the end of the student's junior year. Honors may be achieved in one of two ways: (1) a unified four-course sequence as a senior (some parts of which may consist of directed readings) followed by a comprehensive examination; (2) an honors project to be presented at an oral defense or at a department seminar. This project may be an independent or joint research thesis, or it may be a programming project. Supporting course work may be required. Students interested in pursuing the honors program should consult their department advisor. The student registers for CSci 299, Sec. 8, for course credit for an honors thesis. Upon satisfactory completion of the program, the department may recommend graduation with honors, high honors, or highest honors.

The Computer Science Minor

A minor in computer science consists of six courses: CSci 101-102, Computer Programming I and II, and four other courses in Computer Science (although Math 114, Discrete Mathematics, may substitute for one), at least one of which is at the 200-level.

Here are some sample minors in computer science:

Software sequence: CSci 101-102, Math 114, CSci 160, 170, and 250.

Theory sequence: CSci 101-102, Math 114, CSci 160, 180, 270.

Courses

101 COMPUTER PROGRAMMING I/ LECTURE, LABORATORY

An introduction to computer programming using Java. The theme is the top-down approach to problem solving. Algorithms are developed for the solutions to stated problems, then translated into Java and tested on the computer. For the laboratory component, students are expected to write approximately seven programs throughout the course. Specific topics include decision making, logic design, iteration, arrays, text files, and records. Satisfies the formal analysis requirement. No prerequisites. This course is a prerequisite for most higher-numbered computer science courses. Mr. Chou, Mr. Green, Mr. Joyce, Staff/Offered every semester

102 COMPUTER PROGRAMMING II/LECTURE, LABORATORY

A continuation of CSci 101, covering such topics as string manipulation, data files and their processing, collections, and dynamic data structures such as linked lists, stacks, queues, and binary trees. The usage and implementation of recursion also is discussed. Approximately six programming projects are assigned as the laboratory component of the course. These projects entail the design and implementation of programs involving the topics mentioned above. Prerequisite: CSCI 101. Mr. Chou, Mr. Green/Offered every semester

115 COMPUTER SIMULATION LABORATORY

See Physics 125. Mr. Gould/Offered every year

120 THROUGH 129: SHORT COURSES IN PROGRAMMING LANGUAGES/LECTURE, LABORATORY

Short midsemester courses for 1/4 or 1/2 credit each. Each course will introduce a new programming language to students who already know at least one high-level programming language. Prerequisite: a one-semester college-level programming course. Offered as credit/no credit and do not fulfill any requirements towards the computer science major. Staff/Offered periodically

140 ASSEMBLY LANGUAGE AND COMPUTER ORGANIZATION/ LECTURE, LABORATORY

Covers fundamentals of assembly language programming such as data representation, the instruction set, addressing mode, macros, procedures, input and output facilities, assembler and linker, introduction to logic circuits, and the basic machine organization of conventional computers. The goal is to understand how a computer performs various tasks that are completely hidden from the user in a high-level language. For the laboratory component, students will write several programs in assembly language. Prerequisite: CSci 102. Mr. Chou, Mr. Breecher/Offered every year

160 DATA STRUCTURES AND ALGORITHMS/LECTURE, DISCUSSION, LABORATORY

Deals with advanced data structures such as sets, trees, and graphs, together with the algorithms to manipulate them. Applications to searching and sorting are discussed. Topics include: analysis of algorithms, general trees, balanced trees, priority queues, hash tables, merge-sort, quick-sort, radix sorting and searching, and elementary graph algorithms. Involves a fourth-hour problem-solving session. Programming projects are assigned for the laboratory component. Prerequisite: CSci 102 and Math 114. Mr. Chou, Mr. Green/Offered every year

170 ANALYSIS OF PROGRAMMING LANGUAGES/LECTURE

Deals with the issues of the design and implementation of programming languages from both the syntactic and the semantic point of view. Topics include: the representation of rules of syntax, using context-free grammars, parsing, semantic constructs, control structures, implementation of procedures and parameters, implementation of recursion, and an introduction to the organization of compilers. A typical group term project may be to design and implement a compiler or interpreter for the actual implementation of some language. Prerequisites: CSci 102 and Math 114. Mr. Joyce, Mr. Green/Offered every year

180 AUTOMATA THEORY/LECTURE, DISCUSSION

Studies the abstract models of machines and languages recognized by them, and introduces the concept of computability. Begins with a review of sets, functions, and relations, then continues with finite automata and regular languages, pushdown automata and context-free grammars, grammar transformations and normal forms, and finally the mathematical model of modern computers: Turing machines and computable functions. Some examples of unsolvable problems, such as the halting problem, will be discussed. Involves a fourth-hour problem-solving session. Prerequisite: CSci 102 and Math 114. Mr. Chou, Mr. Green, Mr. Joyce/Offered every year

201 PROSEMINAR IN COMPUTER SCIENCE/SEMINAR

The presentation of topics in computer science by and for senior undergraduates. These presentations acquaint students with diverse subjects, introduce them to researching known topics, and give them practice in presenting material to their peers. Faculty members will also present some research topics. Possible areas the topics may be drawn from might include robotics, networking, NP complete problems, neural networks, expert systems, parallel algorithms. Prerequisites: CSci 160 and CSci 170. Staff/Offered periodically

210 ARTIFICIAL INTELLIGENCE/ LECTURE, LABORATORY

Focuses on the fundamental ideas of artificial intelligence and programming in Lisp. Topics included are knowledge representation schemes, problem representation through explicit models, search techniques, analogy and pattern recognition, natural language parsing, and planning. Students implement the above ideas through computer programs written in Lisp. Language instruction is provided in Lisp (or Prolog), although no prior knowledge of these programming languages is assumed. Prerequisite: CSci 160 Staff/Offered every year

212 NUMERICAL ANALYSIS AND SCIENTIFIC COMPUTING/ LECTURE, LABORATORY

See Math 212. Mr. Chou, Ms. Sternberg/Offered every other year.

215 OPERATING SYSTEMS/ LECTURE, LABORATORY

Studies the structure, performance, and design of operating systems. Topics include concurrency, deadlocks, scheduling, and memory management. Various operating systems may be examined and compared. Students will design and implement parts of operating systems. Prerequisite: CSci 160. Mr. Green/Offered every other year

220 DATABASE MANAGEMENT AND SYSTEMS DESIGN/LECTURE

An advanced course on the realities of database technology. Emphasizes the goals of database management: performance, data integrity, future compatibility, and versatility. The concept of the data model is examined and a specific database is discussed. Concentrates on database design and specification. Prerequisite: CSci 160. Mr. Chou/Offered every other year

230 COMPILER DESIGN/LECTURE, LABORATORY

A continuation of CSci 180, Automata Theory. It uses the automata and grammars introduced in CSci 180 to design translators (compilers) for programming languages. Topics include lexical analysis, top-down parsing, bottom-up parsing, syntax-directed translation, type checking, run-time environment, code generation, and an introduction to code optimization. A typical term project is to write a compiler for a simple programming language such as a subset of C or Pascal. Prerequisites: CSci 160 and CSci 180. Mr. Chou, Mr. Green/Offered every other year

240 COMPUTER ARCHITECTURE/LECTURE

A study of the design of computers. Topics include the design of combinatorial and sequential circuits, design methodology of a basic computer, central processor organization, microprogramming, memory organization, input-output organization, and arithmetic processor design. As time permits, further topics, such as vector and parallel processing, are discussed. A functional, logical (theoretical) approach is adopted. Physics 219, Electronics Laboratory, is recommended so that students gain hands-on experience with computer chips.

The science of design is stressed together with the existing machines. Prerequisite: CSci 140. Staff/Offered every other year

250 SOFTWARE DESIGN AND DEVELOPMENT/SEMINAR

Students consider the life cycle of large software projects, beginning with the elicitation and definition of users' requirements, and continuing through software design, documentation, coding, testing, and maintenance. Topics include: modularity, coupling, cohesion, transformational and transactional structures, and testing strategies. Working in teams, students gain practical experience developing software to solve concrete problems. Prerequisites: CSci 160 and CSci 170. Staff/Offered periodically

270 THEORY OF COMPUTATION/LECTURE

Studies the nature and formal models of computation (by computers), its power and limitation (computability versus uncomputability), the computational complexity of various problems, and the applications in logic and computer science. Turing machines, general recursive functions, and other standard models of computation are introduced. Other aspects of recursion theory, such as unsolvable problems and recursively enumerable languages are introduced. We also address the more practical question "What is an efficient program?" in an introduction to modern complexity theory. Prerequisite: CSci 180. Mr. Chao, Mr. Green/ Offered every other year

280 COMPUTER NETWORKS/LECTURE

Provides an introduction to the theory and practice of the design of computer and communications networks. The TCP/IP Model will be used as the framework with the course progressing through the physical, data link, network, and transport layers. Analysis of network topologies and protocols, including performance analysis, is treated. Current network types including local area and wide area networks are introduced, as are evolving network topologies. Laboratory exercises include the design and implementation of projects such as simulation of the network/transport layer functions, routing, congestion control, an Ethernet

controller, applications using TCP/IP or remote procedure calls. There may be extensive network programming assignments. Prerequisites: CSci 140 and CSci 160. Mr. Breecher.

ECONOMICS

Department Faculty

Wayne B. Gray, Ph.D., *chair: labor economics, econometrics, environmental economics*

John C. Brown, Ph.D.: *economic history, European economy*

Daniel M. Bernhofen, Ph.D.: *international trade, industrial organization, econometrics*

Myles Callan, Ph.D.: *macroeconomics, real-time data analysis, time series econometrics*

Jacqueline Geoghegan, Ph.D.: *environmental economics, econometrics.*

Robert C. Hsu, Ph.D.: *economic development, comparative economic systems, international economics*

Attiat F. Ott, Ph.D.: *public finance, health economics, macroeconomics*

Frank Puffer, Ph.D.: *regional economics, health economics*

E.C.H. Veendorp, Ph.D.: *microeconomic theory, industrial organization*

Maurice D. Weinrobe, Ph.D.: *monetary economics, economics of population*

Emeriti Faculty

Howard W. Nicholson, Ph.D.: *history of economic thought, accounting, investment, economic methodology*

Roger C. Van Tassel, Ph.D.: *international trade and finance, political economy*

Undergraduate Program

Economics offers a flexible, yet consistent framework for understanding key issues facing the economy and society, from globalization of international trade and finance to global warming. The major and minor in economics offer students an opportunity to learn the key elements of this framework and provide them with ample opportunities to apply it to a wide range of key economic issues. The Ph.D. pro-

gram enriches the intellectual community in economics with opportunities for undergraduates to get to know advanced students in economics and for students to take advanced courses in statistics and economic theory not typically available to undergraduate majors.

Since it first attempted to explain the growth and wealth of nations more than two hundred years ago, economics has evolved into a modern social science that combines a coherent analytical framework with careful analysis of information to understand how economies work and develop and the consequences of economic policies and policy change. It applies the basic logic of individual choice and market forces to explore the tradeoffs inherent in addressing many of the key concerns on today's agenda: ensuring rising living standards in the developed and developing countries, assessing the impacts of international trade, and identifying the wisest use of scarce environmental resources, among many others.

The major in economics builds on the expertise the student develops in the first two semesters of courses. It combines a solid background in the core of economic analysis with a wide range of applied courses that investigate the most important fields of economics and many important topics. The capstone experience, honors program, internships, and study abroad offer opportunities for majors to acquire research experience, apply economics in government or business, and deepen their understanding of economic issues.

The economics major also provides skills that are highly valued in a number of careers and graduate programs. The economics major emphasizes developing skills of careful thinking and analysis in combination with the application of those skills in actual settings. Law schools welcome the background economics provides in logical thinking. Government agencies and graduate programs in public policy or economics appreciate the systematic approach to understanding the economy offered by economics. Business schools and businesses find the facility the economics major acquires in analytical thinking and quantitative methods of analysis attractive.

Requirements For The Major

The requirements for the major include 12 courses overall: five required core courses in quantitative methods and economic theory; five elective courses in economics, and two related courses in fields outside of economics. A course including a capstone experience must be taken during the senior year.

Upon declaring the major, students also choose an advisor from among the economics faculty. Students are encouraged to use their initial meetings with their advisor to develop a program that meets their interests and goals. For example, a student concerned about environmental change and developing countries may combine coursework in Environmental Economics (Econ 157 or Econ 257) with Population Economics (Econ 247) and Economic Development (Econ 128 or Econ 228). Students planning on graduate work in economics should consult their advisor early on. Graduate work in economics demands strong mathematical skills, including calculus and other courses in math.

The Undergraduate Economics Handbook provides many detailed suggestions on how students can tailor their major to their interests and career goals including a worksheet for planning the program in the major.

Core Courses

The five core courses provide all students with a common language and a common set of skills that ensure the student is prepared for study of the subfields of economics in the 100- and 200-level elective courses. They also enhance the student's understanding of economic analysis. Economics 10 provides an introduction to the economic way of thinking using a comparative approach. First-year students may also elect to take a first-year seminar course (Econ 100) that provides an in-depth look into key economic issues such as international economic relations or population in place of Economics 10. Either of these courses is the prerequisite for all 100-level courses and Economics 11. Economics 11 provides students

with an overview of the key analytical tools of economics and is the prerequisite for all 200-level courses.

Courses in intermediate microeconomics (Economics 205) and intermediate macroeconomics (Economics 206) deepen the major's understanding of the economic analysis of individual and firm choices, markets, and the economy as a whole. Coursework in statistical analysis (Economics 160) acquaints students with how information can be used to confront hypotheses suggested by basic economic analysis. Majors must have a grade point average of 2.0 in the core courses.

Economics Electives

The five economics electives and the two related courses provide the student with the opportunity to pursue more focused interests within the major. Courses at the 100-level, which are open to all students who have completed Economics 10 or Economics 100, generally provide students with an in-depth look at the institutions and policies important in understanding economies. Courses at the 200-level, which require prior completion of Economics 11, provide a more comprehensive introduction to the literature of economic analysis in an area. Economics majors are required to take at least three of their electives at the 200-level.

Elective offerings include such fields of economic enquiry as international trade and finance, economic development, public budgetary and tax policy, monetary economics, and labor as well as topical courses in areas such as health economics, comparative economics (Asia and Europe), environmental economics, the economics of population, economic history, and the economics of sport.

Students are encouraged to group their electives around their own particular interests. Brochures available from the Department provide detailed suggestions on the appropriate economics electives and related courses for students with interests in international economics, development, and the environment.

Related Courses

Economics majors must also complete two courses that are offered outside of the Economics Department, yet are related to the goals of the economics major. Some courses will satisfy the related course requirement under all circumstances. They include math courses at the level of calculus or above, management courses in accounting, finance, Management and Information Systems (MIS) and operations management, computer science courses, and some courses in economic geography.

Other courses can also meet this requirement provided they complement the program a student has developed. For example, many courses in International Development would provide an important background for a student who has taken Economic Development (Econ 128 or Econ 228), or a student with an interest in government tax and budget policy may want to take additional courses in Government. The departmental faculty advisor can provide suggestions for related courses of this type.

Capstone

Taken during the student's final year in the major, the course that fulfills the capstone requirement offers an opportunity for the student to draw upon the skills and background acquired during the previous years of study. The capstone courses allow students to acquire in-depth knowledge of a topic of interest using a combination of economic analysis and empirical research. The capstone course counts as one of the five economics electives.

There are three ways of meeting the capstone requirement:

- a) Participation in the Honors Program (see below)
- b) 200-level economics research course.
Currently, all 200-level courses include a capstone component.
- c) Independent study course. For students unable to meet the capstone requirement through (a) or (b), arrangements can be made for individually directed research work.

Students must submit the capstone declaration form with the instructor's signature to the Economics Department when enrolling in a course that they have designated as their capstone.

The Honors Program

Economics majors with outstanding academic records (a GPA of 3.4 in economics courses, 3.0 overall) may be accepted by the department as candidates for departmental honors. For students to receive departmental honors, they must also successfully complete an honors thesis. Prospective candidates for honors should develop a proposal for the thesis and identify a faculty supervisor during the second semester of the junior year. During the fall of the senior year, the students will enroll in Economics 297, Honors. The student then writes a thesis under the direction of a faculty supervisor. During the spring of the senior year the thesis is evaluated by the department for possible departmental honors.

Requirements For The Minor

Students majoring in another discipline often discover that a minor in economics can provide a background that can complement their major and allow them to explore an interest in economics. The minor requires a minimum of six courses in economics including Econ 10 and Econ 11. Of the remaining four courses, at least two of them must be at the 200 level. Only courses with a final grade of C- or better will be counted toward the minor.

Study Abroad And Internships

A number of study abroad programs and internships offer important opportunities for students in economics. Each year, a select group of a few juniors in the economics major attend the prestigious London School of Economics for two semesters of study. Many majors take advantage of study abroad opportunities elsewhere as well. Economics majors receive major credit for participation in the London Internship program, which places students in government or business internships in London; the Washington Center program,

which places students in internships designed to acquaint them with policy-making at the federal level; and the Washington Semester program. Other internships can be arranged through the Clark Internship Office under Econ 298. They offer students an opportunity to apply economic analysis in governmental or business settings. Although they can be taken for Clark credit, they do not count towards the ten required courses in the major. Your faculty advisor can provide you with the departmental guidelines for internships in economics.

Graduate Program

Clark University offers a unique program of graduate study and research leading to the doctor of philosophy in economics. The Economics faculty provides students with an excellent opportunity for qualified students to develop proficiency in economic theory, econometrics, and their chosen fields of specialization. The design of the Ph.D. program emphasizes that students acquire experience carrying out independent research. The collegial size of the program ensures students ample opportunities to work with faculty.

The requirements for the Ph.D. include a core of five courses in economic theory and three in mathematical economics and econometrics; qualifying examinations in microeconomic and macroeconomic theory; completion of two fields of the student's choice; completion of two elective courses; and the dissertation. Where appropriate, graduate students may elect to take a limited amount of work in related courses offered by other departments. At least two full academic years of graduate work or the equivalent in part-time work in residence at Clark are necessary. Some teaching and research experience at Clark, or other such teaching and research as the department may regard as equivalent, is prerequisite to the doctoral degree.

Ph.D. students can satisfy the requirements for econometrics and mathematical economics by passing designated courses offered in the department, or in the case of prior preparation, by passing a test given by the department. The

student meets the economic theory requirement by satisfactory completion of the theory courses Economics 300, 301, 302, 303, and 304, and by passing two preliminary examinations.

Fields of specialization and/or electives may be selected from among the following: open economy macroeconomics, public finance, industrial organization, international trade, economic development, applied econometrics, health economics, environmental economics, or one field selected from related subjects. At least two field courses are offered annually. Typically, two fields or one field and two electives are taken during the second year, and the remaining requirement is completed during the third year. Students are required to present at least one paper written to meet field requirements to the Departmental Seminar. Electives should be chosen to provide depth to the Ph.D. students background in economics or breadth needed to carry out dissertation research.

Preparation for writing the dissertation begins during the third year, when the student starts writing the dissertation prospectus. The prospectus lays out the intellectual motivation for the dissertation and the research plan designed to complete it. The dissertation must be an original contribution to knowledge that is based upon independent research, convincingly presented, and acceptably written. The dissertation must be completed within five years of passage of the preliminary examinations. If it is not, the student must successfully retake the preliminary examinations in economic theory before defending the dissertation. Under certain circumstances, published articles may be accepted by the department instead of a dissertation.

The student presents the completed dissertation prospectus at an informal conference with all graduate students and faculty invited to attend. After the presentation, the primary advisor, in consultation with the chair of the department, appoints the dissertation commit-

tee if the topic is judged feasible. Upon completion of the dissertation in a form acceptable to the committee, the candidate makes a copy of the dissertation available to the department, the faculty, and the graduate students for two weeks prior to the dissertation defense. The defense is presented at a seminar open to all faculty and graduate students in the department. Final approval of the dissertation is granted by the committee after consideration of any suggested changes or questions arising from the seminar. Students enrolled in the Ph.D. program may be awarded the M.A. degree upon satisfactory completion of a two-year residency and the preliminary exams. In the case of students who do not continue toward the Ph.D., the M.A. may be awarded upon satisfactory completion of twelve required courses. A student should discuss program plans with the graduate student advisor before registration day and secure approval of the course program.

Scholarship assistance for students admitted to the Ph.D. program is available. Full or partial tuition remission may be granted to particularly well-prepared students. In addition, several teaching assistantships are also awarded, enabling graduate students to gain experience in undergraduate instruction. These cover remission of tuition and a cash payment, currently up to \$10,250 for part-time work. Employment as a research assistant in the department is also available for some well-qualified students.

Institute for Economic Studies

The Institute for Economic Studies was established in 1980 with an initial grant from the John M. Olin Foundation. The Institute's main objectives are to research significant economic policy issues facing the nation and to disseminate the results of the research to a broad audience through conferences and publications.

The Institute provides a framework within which international scholars engage in cooperative research and exchange of ideas. The

Institute's activities are supported through annual private grants. The director of the Institute is Professor Attiat F. Ott.

Courses

010 ECONOMICS: A COMPARATIVE APPROACH/LECTURE, DISCUSSION

Introduces the vital contribution economics can make to systematic thought and understanding by analysis of important current policy issues. Rather than emphasizing economic theory, the course begins with a comparative analysis of issues in the social sciences that are of obvious and important concern. From a study of issues, the course proceeds to show how development and use of some basic economic concepts can aid materially in the analysis. Open to first-year students. Multiple sections. Staff/Offered every semester

011 PRINCIPLES OF ECONOMICS/LECTURE, DISCUSSION

Introduction to economic analysis. Develops a set of economic concepts used in the 200-level courses offered in the department. Elements of price and income theory are emphasized. Policy questions are treated both to reinforce concepts and to illustrate applicability of the analysis. Open to first-year students. Prerequisite: Econ 10. Staff/Offered every semester

100 ECONOMICS OF ENVIRONMENTAL REGULATION/FIRST-YEAR SEMINAR

Can we rely on "the market" to solve environmental problems, or is government intervention needed? How can we measure the benefits and costs arising from environmental regulation? Why do different countries have very different methods of environmental regulation? Learn about how economists analyze these issues, while also learning basic economics. The course will consider a variety of environmental issues, from air and water pollution to endangered species and global warming. Fulfills the comparative perspective. Mr. Gray/Offered every year

108 INTERNATIONAL ECONOMICS: TRADE AND FINANCE/LECTURE, DISCUSSION

Reviews the basic principles of international economics. Examines policy issues in international trade and foreign investment, and explores policy alternatives. Not a prerequisite for Econ 207 or 208, but may be taken in preparation for them. Prerequisite: Econ 10. Mr. Hsu/Offered every year.

113 MONETARY ECONOMICS: THEORY AND POLICY/LECTURE, DISCUSSION

Monetary economics investigates the structure of the financial system, the institutions and customs of that system, and the role of money in the economy. The macroeconomics of money and the role of the Federal Reserve (and other central banks) are studied. Mr. Weinrobe/Offered every year

125 HEALTH ECONOMICS/LECTURE, DISCUSSION

Examines the economic processes and activities of health care systems and institutions. Major issues including competition, role of governments, and insurance are among the topics that are investigated to assist students in understanding how economic considerations affect the delivery of care. Mr. Puffer/Offered periodically

126 PUBLIC POLICY TOWARD BUSINESS/LECTURE, DISCUSSION

Examines the various types of industrial organization, the degrees of monopoly in competition, and the development of public policies that affect business. Among issues traced are the development of antimonopoly regulation, consumer protection, and public utilities. Business performance and government regulations are related to criteria from economic theory. Prerequisite: Econ 10. Mr. Veendorp/Offered periodically

128 ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION

Covers same general topics as Econ 228, but requires less previous preparation in economics. Offered in alternate years with 228 (see Econ 228). Prerequisite: Econ 10. Mr. Hsu/Offered every other year

142 EUROPEAN ECONOMIC HISTORY/LECTURE, DISCUSSION

See Econ 242. Prerequisite: Econ 10.

Mr. Brown/Offered periodically

143 AMERICAN ECONOMIC HISTORY/LECTURE, DISCUSSION

See Econ 243. This course is available as an historical perspective. Prerequisite: Econ 10.

Mr. Brown/Offered periodically

157 THE ECONOMICS OF NATURAL RESOURCES AND THE ENVIRONMENT/LECTURE

A review of political economic problems associated with such natural resources as land, water, and energy goods, as well as a resource common to all of us, our natural environment. Topics include the assessment of environmental impacts within market-oriented economics, and the use of economics in policy designed to address environmental issues such as air pollution, global warming, biodiversity, and suburban sprawl. Prerequisite: Econ 10.

Ms. Geoghegan/Offered periodically

160 INTRODUCTION TO STATISTICAL ANALYSIS/LECTURE, DISCUSSION

Examines basic concepts and techniques of statistical method in economic analysis: descriptive statistics, probability theory, sampling distributions, hypothesis testing, and simple and multiple regression. Mr. Puffer, Mr. Veendorp/Offered every semester

176 COMPARATIVE ECONOMIC SYSTEMS/LECTURE, DISCUSSION

Examines the major varieties of developed market economies and of transitional and developing economies. Topics include Japan's industrial policy and business groups, Germany's social market economy and codetermination, Sweden's welfare state and labor unions, economic reforms in China and Russia, and economic development in Korea.

Prerequisite: Econ 10. Mr. Hsu/Offered every other year

177 JAPANESE AND CHINESE ECONOMIES/LECTURE, DISCUSSION

Surveys the Chinese and Japanese economies—their development, institutions, and policies. Topics include historical back-

ground, agricultural development, industrial organization and development, fiscal and monetary policies, employment and labor, Sino-Japanese relations, and relations with the U.S. Prerequisite: Econ 10. Mr. Hsu/Offered every year

205 MICROECONOMIC THEORY/LECTURE, DISCUSSION

Describes and analyzes how a market-oriented economy functions in answering the five basic economic questions: (a) What commodities to produce? (b) How much of each to produce? (c) What productive techniques to use and how to provide incentives? (d) How to distribute the output among the various members of society? (e) What provision to make for the future? Interspersed with theory, the course contains frequent examples that demonstrate the use of microeconomics in solving problems faced by decision makers in both the private and public sectors. Prerequisite: Econ 11. Mr. Veendorp, Ms. Geoghegan, Mr. Gray/Offered every semester

206 MACROECONOMIC THEORY/LECTURE, DISCUSSION

Macroeconomics is one of the core elements of economics. The subject includes the study of the determinants and behavior of the aggregate economy, including income, employment and the price level. The economy is examined at a point in time (statics) as well as over time (dynamics). Mr. Weinrobe, Mr. Callan, Ms. Ott/Offered every semester

207 INTERNATIONAL TRADE THEORY/LECTURE, DISCUSSION

Studies international trade theory and policy at the intermediate level. Examines the fundamentals of international trade theory: comparative advantage, gains from trade, neoclassical trade theory, trade and income distribution. Traditional and modern instruments of protectionism, arguments for and against free trade, and the role of international institutions are discussed. Prerequisite: Econ 11; Econ 205 is recommended. Mr. Bernhofen/Offered every year

208 INTERNATIONAL MONETARY THEORY/LECTURE, DISCUSSION

International macroeconomics at the intermediate level. The fundamentals of international finance are studied: operations of international currency markets; the concept of the balance of payments; fixed versus flexible exchange rate regimes. Analyzes macroeconomic policies under different exchange rate regimes; theories of exchange rate determination, and the working of different international monetary regimes. Prerequisite: Econ 11 and 206 are recommended. Mr. Callan, Mr. Bernhofen/ Offered periodically

215 GOVERNMENT FINANCE: BUDGET POLICY IN A COMPARATIVE SETTING/LECTURE, WORKSHOP

Develops concepts relevant to the study of government finance under alternative structures: federalism, unitary governments, and regime types: democratic/authoritarian. Analyzes topics such as the conflict between public interest and private interest, the size and growth of government, and the application of budget policy to achieve efficient allocation of resources and economic growth. The decision-making process of the government is examined using public choice (voters-bureaucrats) models. Prerequisite: Econ 11 or permission of instructor. Staff/Offered every other year

216 TAX AND DEBT FINANCE/LECTURE, WORKSHOP

Applies tools of economic analysis to the study of taxation and the public debt. Analyzes emerging issues in taxation such as the flat tax, consumption-based tax and the value-added tax. Concepts such as the trade-off between equity and efficiency, tax burden, tax competition and tax exporting are explained with reference to experiences of the U.S. and its trading partners. The equivalence of debt finance to tax finance is analyzed. The implication for growth in the public debt for the stability and performance of the U.S. economy is critically evaluated. Prerequisite: Econ 11 or permission of instructor. Staff/Offered every other year

222 LABOR/LECTURE, DISCUSSION

Applies the concepts of labor supply and labor demand in a basic model of labor markets. The model is used to analyze the results of the labor market: wages, employment, and unemployment. The analysis is modified to allow for market imperfections and nonmarket forces, including trade unions and the government. Further topics include wage discrimination and income inequality. Prerequisite: Econ 11. Mr. Gray/Offered every other year

223 CONTEMPORARY POLITICAL ECONOMY/SEMINAR

Examines the interaction of political and economic forces in evolving capitalist and socialist societies. Prerequisite: Economics 11. Staff/Offered periodically

225 HEALTH POLICY/LECTURE, DISCUSSION

Analyzes the role economics plays in shaping U.S. health policy. Among issues discussed are: health as a "priceless" commodity, the relationship between health and wealth, moral hazard of health outcomes in relation to medical intervention, the consequences of longevity for the cost of medical intervention and quality of life. Access to health care, especially lack of health insurance, is examined within alternative delivery systems: nationalized versus private-public mix. Future health policies for the U.S. are discussed in the context of intergenerational allocation of societal resources between the young and the old. Prerequisite: Econ 11 or permission of instructor. Mr. Puffer/Offered every other year

226 INDUSTRIAL ORGANIZATION/LECTURE, DISCUSSION

Takes the concepts learned in Intermediate Microeconomic Theory to the next level. More complicated theories of firm behavior are examined. By allowing issues such as product differentiation and imperfect knowledge to enter the analysis, students gain access to more realistic views of industrial structure and performance. Practical applications of these theories can then be examined through the use of specific industry studies. Prerequisite: Econ 11. Mr. Veendorp/Offered periodically

228 ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION

Examines the major theories of economic development, the major problems confronting less developed countries, and the policies and strategies appropriate for economic development. Topics include agricultural development, income distribution, industrialization strategies, foreign aid and investment, population, labor, and employment. Offered in alternate years with Econ 128. Prerequisite: Econ 11. Mr. Hsu/ Offered every other year

242 EUROPEAN ECONOMIC HISTORY/LECTURE, DISCUSSION

Emphasizes that the economic history of Europe offers key lessons for understanding contemporary debates about development, economic performance, and globalization. After a close look at the pre-industrial Malthusian economy, the course critically explores industrialization and its consequences in Great Britain, Germany, France and Russia. An investigation of economic integration before 1914, the Great Depression, and the post-1945 rebuilding of Europe offers insights into the causes and impacts of economic integration. Prerequisite: Econ 11. Mr. Brown/Offered every other year

243 AMERICAN ECONOMIC HISTORY/LECTURE, DISCUSSION

Offers a comprehensive survey of the development of the United States economy from a colonial backwater to a leading industrial power. It emphasizes the use of economic reasoning to understand historical controversies such as the struggle over slavery, the causes of the Great Depression, discrimination in labor markets, and the rise of the American export economy. Fulfills historical perspective. Prerequisite: Econ 11. Mr. Brown/Offered every other year

244 EUROPEAN ECONOMY: EAST AND WEST/ LECTURE, DISCUSSION

Offers a critical examination of European approaches to economic policy. In the West, these include the modern welfare state (widely

available health care and housing), a more heavily regulated labor market, and moves toward a common market and currency. In the East, governments relied upon central planning and state ownership, even scoring some initial successes. Blending the tools of economic analysis with a close look at policies, this course will offer answers to these questions and an introduction to the economic challenges facing Western and Eastern Europe in the aftermath of the revolutions of 1989. Prerequisite: Econ 11. Mr. Brown/Offered every other year

245 THE HISTORY OF GLOBAL ECONOMY/LECTURE, DISCUSSION

Provides students with a comprehensive introduction to the history of the global economy. Using straightforward tools of economic analysis, we study the debate over the origins of the global economy, the growth of it before World War I, its destruction during the Great Depression, and its re-emergence during the past 50 years. The course focuses on the potential impacts of globalization on economic growth, the distribution of benefits (and costs), and the role played by colonialism and imperialism. Fulfills historical perspective. Prerequisites Econ 11. Econ 108 or Econ 208 recommended. Mr. Brown/Offered every other year

247 ECONOMICS OF POPULATION/LECTURE, DISCUSSION

The economics of population, economic demography, is the analysis of the economic forces that influence population and the demographic factors that affect traditional economic variables. The subject has strong ties to the economics of development, labor, health, and macroeconomics, as well as to other disciplines of the social sciences. Prerequisite: Econ. 11. Mr. Weinrobe/Offered every other year

250 ECONOMICS OF SPORT/LECTURE, DISCUSSION

Applies economic analysis to the sports industry. While the primary focus is on professional team sports, individual and amateur sports are

covered as well. Labor relations, antitrust law, public subsidization of sports facilities, discrimination, and sports broadcasting are among the topics that are covered from an economics perspective. Prerequisite: Econ 11. Mr. Puffer/ Offered periodically

257 ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS

Examines some of the issues associated with the economics of natural resources and the environment. Topics discussed, at both the theoretical and empirical level, are chosen from the following: the theory and analysis of renewable and nonrenewable resources, resource scarcity and the economy, sustainable development, and the measurement of the benefits and costs of environmental regulation. Proper policies are discussed to encourage resource conservation, the problems of common property resources and the use of economic incentives to internalize environmental externalities. Prerequisite: Econ 11 (LAS 256) Ms. Geoghegan/Offered periodically

260/360 PROBABILITY AND STATISTICS/LECTURE

Introduces the fundamentals of probability and mathematical statistics using calculus, with an emphasis on the probabilistic foundations required to understand probability models, and the statistical methods upon which econometric models are based. Topics covered include the probability axioms, basic combinatorics, random variables and their probability distributions, mathematical expectation and common families of probability distributions. Prerequisite: Math 131. Ms. Bernhofen/Offered every year

261/361 TOPICS IN STATISTICS/LECTURE

This course provides a detailed theoretical foundation for econometric analysis. The emphasis is on the development of fundamental statistical concepts of inference and hypothesis testing from a classical perspective using the tools of probability theory. Topics that we will investigate include sampling and sample distributions, graphical data analysis,

point and interval estimation, hypothesis testing, and an introduction to Bayesian inference. Prerequisite: Math 217 or Econ 260. Ms. Bernhofen/Offered periodically

265 ECONOMETRICS

This course deals with the application of statistical methods to economics. The objective is to expose students to: economic model building, testing the model statistically and applying the model to practical problems in forecasting and analysis. By understanding the theoretical and econometric basis of equations, students gain proficiency in formulating, estimating and interpreting testable relationships on their own. Prerequisite: Econ 11 & 160. Staff/Offered periodically

267 APPLIED ECONOMIC RESEARCH

This course introduces students to the tools of applied economic research in the context of a large research project, carried out as a collaborative effort. Students will be split into research teams for data collection and analysis. The course will cover different topics, depending on the research interest of the instructor. Prerequisite: Econ 160 and permission of the instructor. Mr. Gray, Mr. Brown/Offered periodically

271/371 INTRODUCTION TO MATHEMATICAL ECONOMICS/LECTURE, DISCUSSION

An introductory survey of the use of mathematical methods in economic analysis. Topics include elements of linear algebra, optimization, and differentiated equations. Prerequisite: Econ 11 and permission of instructor. Offered for variable credit. Staff/Offered every year

273 FORECASTING/LECTURE, DISCUSSION

Investigates a number of forecasting techniques commonly used in economic analysis. Among the techniques covered are time series analysis, econometric models, simulation models, and expectations surveys. Prerequisites: Econ 11 and 160 or equivalent. Mr. Puffer, Mr. Callan/ Offered periodically

277 URBAN ECONOMICS/LECTURE, DISCUSSION

Economic decisions made by firms and individuals regarding production, investment, and consumption activities inevitably involve a location decision. The implications of such location decisions for urban structure, urban and regional growth, and the existence of cities themselves are discussed. Topics include: location theory, interregional input/output tables, migration and regional growth. Prerequisite: Econ 11. Staff/Offered every year

297 HONORS

Students work on an individual basis with a faculty member on an intensive piece of research, culminating in an honors thesis. A student desiring departmental honors must register for one semester of Econ 297 in the fall of the senior year. Required for departmental honors. Prerequisite: permission of instructor. Staff/Offered every year

298 INTERNSHIP

Students spend a semester working full- or part-time outside the University as part of their academic experience. To qualify, the internship experience must significantly involve an extension, embodiment, or illustration of previous or concurrent, systematic academic work in economics. Offered for variable credit. This course does not count toward the economics major. Staff/Offered every year

299 INDEPENDENT STUDY

Offered for variable credit. Staff/Offered every year

The following courses are normally open only to graduate students:

300 INTRO GRAD ECONOMICS THEORY

Staff/Offered every year

301 MICROECONOMICS-CONSUMER/SEMINAR

Mr. Gray, Mr. Veendorp/Offered every other year

302 MICROECONOMICS-PRODUCER/SEMINAR

Mr. Bernhofen, Mr. Brown/Offered every other year

303 MACROECONOMICS/SEMINAR

Ms. Ott/Offered every year

304 MACROECONOMICS/SEMINAR

Mr. Callan/Offered every year

307 INTERNATIONAL ECONOMICS/SEMINAR

Mr. Bernhofen/Offered periodically

308 OPEN ECONOMY MACROECONOMICS

Mr. Callan/Offered periodically

315 PUBLIC FINANCE/SEMINAR

Staff/Offered periodically

325 HEALTH ECONOMICS/SEMINAR

Mr. Puffer/Offered periodically

326 INDUSTRIAL ORGANIZATION/SEMINAR

Mr. Veendorp/Offered periodically

328 ECONOMIC DEVELOPMENT/SEMINAR

Mr. Hsu/Offered periodically

357 ENVIRONMENTAL ECONOMICS/SEMINAR

Ms. Geoghegan/Offered periodically

360 PROBABILITY & STATISTICS

Ms. Bernhofen/Offered every year

361 TOPICS IN STATISTICS

Ms. Bernhofen/Offered periodically

365 BASIC ECONOMETRIC THEORY/LECTURE

Qualified undergraduates need the instructor's permission. Mr. Bernhofen/Offered every year

366 APPLIED ECONOMETRICS/SEMINAR

Mr. Gray/Offered every other year

371 INTRO TO MATHEMATICAL ECON

Staff/Offered every year

EDUCATION

Department Faculty

Thomas Del Prete, Ed.D., *chair; director of the Jacob Hiatt Center: Teacher education, history learning, professional development schools, learning communities, spirituality and education*

John Ameer, Ph.D.: *Secondary school reform and curriculum: social, cultural, and political foundations of education*

Tom Berninghausen, Ph.D.: *Literature and humanities learning*

S. Leslie Blatt, Ph.D.: *Experimental physics, methods and practice in science education, science and society, environmental issues and their scientific dimensions*

Sharon Griffin, Ph.D.: *Emotional development, cognitive development, mathematics education*

Sarah Michaels, Ph.D.: *relationships among language, discourse, culture, and schooling; discourse analysis relating to classroom life and learning; teacher research*

Maureen Reddy, Ed.D.: *Literacy, classroom discourse, children's literature, teacher research*

David S. Zern, Ph.D.: *Moral development, values and religiosity; exploration and development of values education in schools; teacher research; analysis of learning and teaching*

Clinical Faculty

Holly Dolan-Rourke, M.Ed.

Fiona McDonnell, Ed.D.

Kenner Myers, M.S. in Education

Nathaniel C. Seale, M.Ed.

Marlene Shepard, M.A.

Emeriti Faculty

Helen J. Kenney, Ed.D.

William C. Kvaraceus, Ed.D.

Programs offered through the Education Department and Jacob Hiatt Center for Urban Education build on and extend students' work in the liberal arts. Programs accommodate both those students who are preparing to assume professional roles in education and those interested in learning about education for its own sake.

Program Overview

The Education Department, the Jacob Hiatt Center for Urban Education, and liberal arts faculty work together in collaboration with the Worcester Public Schools to provide students with outstanding programs in urban teacher education. These programs correspond to requirements for teacher licensure in the Commonwealth of Massachusetts.

Programs are designed to qualify both undergraduate and graduate students for the initial license at the elementary, middle, and secondary teaching levels. The initial license is the second level of licensure in Massachusetts and qualifies students to teach in Massachusetts and most other states. The master's program in "Urban Education and Teacher Research" is designed to help teachers meet the state requirements for the professional license. Beginning teachers must teach successfully for three years to fully qualify for this license.

In addition, the department offers special programs in human services and school psychology (these programs do not lead to licensure or certification), as well as periodic undergraduate and graduate courses on selected topics in current education reform, teaching, curriculum and learning, and educational research.

Core Values and Commitments

- preparing students to work with diverse groups of children in urban settings, with emphasis on understanding the role of language and culture in education;
- developing teachers as reflective learners and practitioners able to build learning communities with both children and adults, in part by introducing them to various "ways of knowing" in the liberal arts;
- developing teachers as "researchers" disposed and able to inquire into their own teaching practice and children's learning;
- collaborating among education faculty, liberal arts faculty, researchers, teachers, and students in the "professional development school" partnership between Clark and the Worcester Public Schools;

- exposing students to exemplary learning programs for children in the professional development schools established through the efforts of the Hiatt Center, Education Department, and the Worcester Public Schools.

Jacob Hiatt Center for Urban Education

The Jacob Hiatt Center for Urban Education is a partnership between Clark University and the Worcester Public Schools dedicated to rethinking the challenges and possibilities of contemporary urban schools. The center brings together teachers, administrators, researchers, and students to foster innovation and scholarship in education.

Professional Development School Collaborative

Much of the learning in the teacher education programs takes place in a professional development school. This is a school uniquely committed to both teacher learning and student learning. Our programs are fully integrated with a set of urban elementary, middle and secondary schools located in or near the south quadrant of Worcester, neighboring Clark. The faculty and administrators at these Worcester public schools work continuously with Clark faculty, undergraduate teacher preparation students, and master's students. Each school has a teacher coordinating this work full time, and each is an important site for education reform. Each site provides Clark students with an exceptional opportunity to develop as teachers, to understand curriculum and learning, and to support and assess diverse learners.

The professional development school collaboration with the Worcester Public Schools is a large part of Clark's efforts to ensure high quality and distinction in its programs, and to contribute to education reform. The schools and the Jacob Hiatt Center for Urban Education are bound together in mutual support, commitment and service.

University Park Campus School

Clark and the Worcester Public Schools have collaborated on the development of the University Park Campus School (UPCS), an exemplary grade 7-12 neighborhood school and the centerpiece of a neighborhood renewal project. The school is infused with a strong sense of purpose, focusing on preparing its students for university-level academic work, plus a spirit of community fostered by the participation of families and Clark students and faculty in all of its programs. Students who graduate from this "school with a promise" are eligible to attend Clark tuition free. "Going to a university has been my one dream," said a University Park student. UPCS is one of the professional development schools for middle and secondary level students, and it is the single-most important example of our effort to integrate school, university and community renewal.

Initial Teacher Licensure

In order to qualify for the initial teaching license in Massachusetts, a student must earn (or hold) a bachelor's degree in the arts and sciences with a disciplinary or interdisciplinary major, and must have taken courses appropriate to her/his instructional field(s), as well as courses that meet the state "professional standards" for teachers. Additionally, the law requires that all teacher candidates pass the Massachusetts Tests for Educator Licensure.

The Education Department and the Hiatt Center offer programs leading to the initial license at the elementary, middle, and secondary levels for both undergraduate and graduate students. Each program integrates course work with field experiences in professional development schools under the guidance of education faculty and expert practitioners. Qualified undergraduates may complete a program for the initial license during a tuition-free fifth year as "BA/MA" participants in the Master of Arts in Teaching program (See Clark BA/MA program requirements)

Elementary (Grades 1-6) Initial Program

EDUC 152 Complexities of Urban Schooling (required for undergraduates only)

EDUC 260 Literacy Development

EDUC 261 Human Development and Learning

EDUC 282 Ways of Knowing in the Arts

EDUC 283 Ways of Knowing in History Social Sciences

EDUC 284 Ways of Knowing in the Humanities

EDUC 286 Ways of Knowing in the Physical and Natural Sciences

EDUC 287 Ways of Knowing in Mathematics

EDUC 288A Practicum: Elementary Teaching and Learning

EDUC 288B Seminar in Elementary Teaching and Learning

Students seeking to qualify for the elementary teaching license must take a range of courses in the arts and sciences that correspond to state subject matter knowledge requirements. This requirement may affect a student's choice of liberal arts major. Students should contact the elementary program coordinator in the Education Department as early as possible to discuss this and other program requirements.

Middle School (Grades 5-8) Initial Program

(In the following areas: Biology, English, General Science, History, Mathematics, and Physics)

EDUC 261 Human Development and Learning or PSYC 150 Development in Child and Adolescent

EDUC 270 Sec. 1 Becoming an Effective Middle School Educator

EDUC 152 Complexities of Urban Schooling

One "Ways of Knowing" course corresponding to teaching field (see list above)

EDUC 278A Practicum: Middle School Teaching and Learning

EDUC 278B Seminar in Middle School Teaching and Learning

Secondary (Grades 8-12) Initial Program

(In Biology, Business, Chemistry, English, Earth Science, French, History, Mathematics, Music, Physics, Spanish and Visual Arts)

EDUC 261 Human Development and Learning or

EDUC 190 Experience of Adolescence

EDUC 270 Sec. 2 Becoming an Effective Secondary School Educator

EDUC 271 Cultures of American Schools or

EDUC 152 Complexities of Urban Schooling

EDUC 272 Focusing on a Discipline

One "Ways of Knowing" course corresponding to teaching field (see list above)

EDUC 279A Practicum: Secondary School Education

EDUC 279B Seminar: Secondary School Teaching and Learning

Master's in Urban Education and Teacher Research

The master's program in Urban Education and Teacher Research is designed for full-time students (including undergraduates who qualify for both the initial teaching license and the fifth year "BA/MA" program). This one year, 10 course program provides well-rounded experiences: core courses in the areas of culture, language, teaching and teaching research; extensive teaching responsibility in professional development schools under the guidance of education faculty and expert practitioners; intensive summer institute courses with arts and sciences, education and K-12 teaching faculty; course work in a student's teaching field; a teacher research project and teaching portfolio. Teachers who wish to enroll as part-time students should consult with the Education Department.

Master's Required Courses

EDUC 311 Teaching and Learning

EDUC 327 Culture, Language, and Education

EDUC 367 Clinical Field Experience and Seminar I

EDUC 368 Clinical Field Experience and Seminar II

In addition, students normally take one summer institute course and two additional courses during the academic year, including courses corresponding to their subject matter field. Part-time students who are already fully licensed take additional course work in lieu of field experience. All of the courses for full or part-time students must be determined in consultation with the Education Chair or the Program Coordinator.

Master of Arts in Teaching

The Master of Arts in Teaching (M.A.T.) program is designed for full-time students (including undergraduates who qualify for the fifth year "BA/MA" program) seeking the initial teaching license at either the elementary, middle or secondary levels. It begins in spring/summer and extends through the following academic year. Students enter as part of a cohort team that is guided through the program by university and school mentors. They are placed with a teacher mentor in one of the Hiatt Center professional development schools at the beginning of the academic year, and take the equivalent of ten or eleven courses, including the teaching practicum, depending on their prior course work and planned teaching level.

M.A.T. Required Courses

EDUC 311 Teaching and Learning
EDUC 326A Ways of Knowing Seminar
EDUC 361 Human Development and

Learning

A Curriculum and Knowing summer institute in the arts, humanities, mathematics, the physical and natural sciences or history/social sciences

Ways of Knowing courses in the humanities, mathematics or the physical and natural sciences, depending on the student's teaching field

Practicum in elementary, middle or high school teaching

Seminar in elementary, middle or high school teaching

Each middle and secondary level student takes an additional course corresponding to her/his teaching field, as well as courses focused on teaching at the middle or secondary level. Elementary level students also take EDUC 360 Literacy Development.

Special Programs

Human Services Program

This four-course sequence is designed for students interested in pursuing a career and/or graduate study in education and the helping professions. Students will have course work and field experiences dealing with diverse groups including children, families, and the aged in settings which include schools, the court system, mental health agencies, and institutions. Students will acquire skills through a balance of study and applied field work. Work in the Worcester area will serve to integrate material from the sequence.

Students receive an official transcript notation documenting the completion of this program.

EDUC 155 Education and Social Policy
EDUC 194 Field Experience I
EDUC 195 Field Experience II
EDUC 269 The Skilled Helper

School Psychology Program

This four-unit sequence provides intensive first-level training for students in the junior and senior years considering advanced graduate work in school psychology and related professional fields. Students are required to complete a two-semester placement for 10 hours a week under the supervision of a school counselor/social worker/school psychologist. Students receive an official transcript notation documenting the completion of this program.

EDUC 266 Analysis of Individual Ability and Style
EDUC 268 Section 1 Psychoeducational Methods Semester I
EDUC 268 Section 2 Psychoeducational Methods Semester II

Courses

021 LITERACY, LEARNING, WRITING/LECTURE, DISCUSSION

See English 021. Ms. Geller/Offered every other year

105 NATURE AND BASIS OF MORALITY/FIRST-YEAR SEMINAR

This seminar will examine a variety of meanings for, and influences on, morality.

Influences considered will include the family, schools, religion, peers, and the individual him/herself. In addition to intensive consideration of a diverse set of primary source readings in both behavioral sciences and in religious writings (the latter to a lesser extent), students will analyze answers to questionnaires they and previous classes have collected on the subject, and they will use those analyses in a systemic way to test their own and others' hypotheses.

Past experience with the course suggests strongly, albeit somewhat unsystematically, that tolerance and appreciation by the students of both complexity and even ambiguity helps to foster a better educational experience for both students and faculty. Fulfills the values perspective. Mr. Zern/Offered every year

112 TRANSFORMATION SCHOOLING: DOCUMENTARY VIDEO FOR SOCIAL CHANGE/FIRST-YEAR SEMINAR

This is a field-based and inquiry-oriented seminar, an apprenticeship in documentary filmmaking as well as in school and community research and advocacy for social change. The course involves instruction in the basics of video production (using state of the art digital cameras) and seminar members partner with new and experienced teachers in inner city public schools. We work with them as video assistants and also develop our own films about the challenges and possibilities of urban school reform. In addition to "hands-on" activity, there is serious attention to reading in the field of ethnographic research, education reform, and community institutions that support youth development. Moreover, seminar members get involved in grass roots organizing and soliciting input from the community, as well as on-

going critique of their planning documents, their filmed footage, and their written companion texts. We thus integrate fieldwork with theory and reflective critique. A final project for this seminar will be completed in the spring semester. Fulfills the values perspective and is recommended for all Communication and Culture majors. Ms. Michaels/Offered every year

152 COMPLEXITIES OF URBAN SCHOOLING/LECTURE, DISCUSSION

Addresses the social and academic questions that surround urban education using linguistic, sociological and psychological perspectives. Through lecture, discussion, and fieldwork, students will explore challenges faced by educators. Required of undergraduate students in the elementary provisional certification program. Mr. Ameer/Offered every year

155 EDUCATION AND SOCIAL POLICY/LECTURE, DISCUSSION

Examines social problems, social policy, and education. Conceptual tools for the analysis of social policies are used. Examinations of existing programs and social agencies enable students to understand agency functions, client population, and the relationship between the individual agency and the larger social service network. Emphasis is placed on social problems and "social solutions," linking individuals and external primary groups with societal resource systems, and the impact of social policy change on individuals and institutions. Mr. Seale/Offered every year

190 THE EXPERIENCE OF ADOLESCENCE/LECTURE, DISCUSSION

Explores adolescent development through theory and research drawn from the behavioral and social sciences as well as fiction. Students study education during the adolescent years. Special social and interpersonal problems and issues confronting today's adolescent are considered, as are relevant teaching and learning theories. Students apply the course material to both teaching and learning in a series of descriptive and analytic reports. Mr. Zern/Offered every year

194-195 FIELD EXPERIENCE: SPECIAL EDUCATION AND HUMAN SERVICES/DISCUSSION, FIELD PLACEMENT

Provide direct, supervised experience within educational and human services agencies. Placements are based upon students' experience, goals, and academic backgrounds. Placement possibilities include schools, mental health centers, institutions, the courts, substance abuse centers, crisis agencies, and group homes. A weekly seminar provides the opportunity for students to analyze their field work experience. Special note: These courses may be taken as a full-year, two-course sequence (Education 194 and 195) or as a single course either semester (Education 194). Mr. Seale/Offered every year

208 LITERACY ACROSS THE CURRICULUM/LECTURE, DISCUSSION, SEMINAR, FIELD PLACEMENT

Designed for students teaching at both the middle and secondary levels. Focuses on literacy issues affecting learning across all curriculum areas, as well as the particular reading-writing and discourse issues which learning in different disciplines. Field work will enable students to try various instructional strategies and assessment practices. Staff/Offered periodically

252 YOUNG CHILDREN AND THE ARTS/LECTURE, DISCUSSION, STUDIO

The development of children's abilities to express themselves through varied symbolic forms is examined. Students express themselves using different media in the studio. Classroom instructional at the early childhood and elementary levels are explored. No prerequisites. Ms. Fisher/Offered periodically

254 DISCOVERING PHYSICS/LABORATORY

See Physics 20. Education 254 is open to education graduate students only. Undergraduates take Physics 20. Mr. Blatt, Mr. H. Gould, Mr. M. Gould/Offered every year

260 LITERACY DEVELOPMENT/LECTURE, DISCUSSION, SEMINAR, FIELD PLACEMENT

An overview of the development of reading, writing, and literacy-related oral language abilities

from the preschool years through high school. Links between oral and written skills and between reading and writing are examined. Special attention will be given to the teaching of reading and writing in ways that support greater student engagement. Fieldwork in schools will enable students to try out various instructional approaches. Ms. Reddy/Offered every year

261 HUMAN DEVELOPMENT AND LEARNING/LECTURE, DISCUSSION

Introduces students to central and evolving understandings of human development and their implications for learning and pre K-12 schooling. Particular emphasis will be given to cognitive and sociocultural theories of learning and development. Ms. Griffin/Offered every year

265 EMOTIONAL DEVELOPMENT/SEMINAR

Examines what emotions are and how they develop from birth to adulthood. Emphasis is placed on emotional development during childhood; on the ways emotions are shaped by cognitive, social, and biological factors; and on the ways emotions shape learning and behavior. Ms. Griffin/Offered every year

266 ANALYSIS OF INDIVIDUAL ABILITY AND STYLE/LECTURE, DISCUSSION, PRACTICUM

Uses techniques to understand the individual as a whole. The theory of individual assessment, some tools for assessment, and the analysis of assessment data will be covered. Focus is placed on understanding, administering, and interpreting both traditional and alternative assessment tools, including measures of cognitive ability, scholastic achievement, and personality. Students are required to administer assessment procedures and analyze case histories. Mr. Zern/Offered every year

267 ROLE OF VALUES IN EDUCATION/LECTURE

Explores the roles values play in the educating process. A classification of values will be developed, followed by a variety of models to understand how values develop in a society. Selected descriptive, empirical, and theoretical analyses will be considered to understand the impact

values have on other behaviors. Students will develop and explore the interaction of values and educating. Mr. Zern/Offered periodically

268 SEC. 1 & 2 PSYCHOEDUCATIONAL PRACTICUM AND SEMINAR/SEMINAR, FIELD PLACEMENT

Provides a two-semester placement, eight to 10 hours a week, with the pupil personnel department of a public school system. A school psychologist and/or a counselor will function as an ongoing supervisor. Activities include experience in conducting and interpreting psychoeducational assessments, obtaining social and developmental history information through home visits, and observing and participating in the development of individualized educational plans as part of the team evaluation process. Mr. Seale/Offered every year

269 THE SKILLED HELPER/LECTURE, DISCUSSION, PRACTICUM

Designed for the development of the helping professional. Emphasis is placed on dynamics of the helping relationship and basic interviewing skills. Class exercises are used to facilitate skill development. Students who are not concurrently taking a field course are placed in a human service agency one half-day per week. Mr. Seale/Offered every year

270A BECOMING AN EFFECTIVE MIDDLE SCHOOL EDUCATOR/LECTURE, DISCUSSION, FIELD EXPERIENCE SEMINARS

Takes place at the Sullivan Middle Professional Development School under the direction of Clark education faculty and the Sullivan professional development school coordinator. Grounded in an understanding of the developmental characteristics and needs of middle school-age students, it enables students to understand and develop competency in various practices—such as cooperative learning (including “complex instruction”) and reciprocal teaching—that engage students of diverse backgrounds in active learning. Mr. Del Prete/Offered periodically

270B BECOMING AN EFFECTIVE SECONDARY EDUCATOR/LECTURE, DISCUSSION, FIELD EXPERIENCE

Investigates the teaching process as a dynamic, complex human endeavor requiring the mastery of a variety of skills and the acquisition of a specific knowledge base. Mr. McDermott/Offered every year

271 CULTURES OF AMERICAN SCHOOLS/LECTURE, DISCUSSION, SCHOOL VISITS

This course will examine the nature and make-up of the cultures surrounding and composing American schools from a variety of points of view in order to understand better the nature of schooling in America. A fieldwork component is required and students will read from a variety of social science sources, including science fiction and supreme court decisions. Mr. Zern/Offered every year

272 FOCUSING ON A DISCIPLINE IN THE SECONDARY SCHOOL/LECTURE, DISCUSSION, FIELD EXPERIENCE

Investigates the teaching process by direct observation of and interaction with practitioners in a secondary school. Students will acquaint themselves with a high school to acquire a sense of the community make-up. Students will observe and work with teachers in their subject area and will volunteer to aid in class, in correcting papers, in labs, in tutoring, and in preparing worksheets. Students will also teach one class. Ms. Rodrigues/Offered every year

273 SCIENCE AND SOCIETY

Deals with the construction of knowledge and authority in the physical and biological sciences. Processes of change in science are studied, how science is situated in history, the mutual influences between science and culture, and characteristic forms of thinking and practice in different branches of science (primarily physics and biology), as well as how these compare to other human endeavors. Themes from the philosophy, history, and the sociology of science will be integrated, as well as science and technology studies. The nature of “scientific

ic literacy” and issues germane to the teaching and learning of science in schools will be studied. Mr. Blatt/Offered periodically

278A PRACTICUM: MIDDLE SCHOOL TEACHING/LEARNING

Involves at least 300 hours of teaching/learning experience at a professional development school. Students will be supervised by education faculty and/or professional development school teachers. Mr. Del Prete/Offered every year

278B SEMINAR: MIDDLE SCHOOL TEACHING/LEARNING

The aim of this field-based seminar is to foster reflective practice, and to deepen understanding of how to engage, support, sustain, and assess the learning of diverse students. Students will conduct rounds and develop and present a portfolio of their work which meets Massachusetts curriculum and teaching guidelines. Mr. Del Prete/Offered every year

279A PRACTICUM: SECONDARY EDUCATION

The culminating experience for the secondary provisional certification candidate. Students complete at least 300 hours of fieldwork with corresponding seminars and conferences. Staff/Offered every year

279B SEMINAR: SECONDARY SCHOOL TEACHING & LEARNING

See 278B. Mr. Del Prete/Offered every year

281 THE EARLY CHILDHOOD EDUCATOR: THEORY AND PRACTICE/SEMINAR, FIELD PLACEMENT

Introduces students to early childhood education. Each student spends six hours a week in a field placement and attends a weekly two-hour seminar. Day-care centers, nursery schools, and kindergartens are considered field sites. Addresses the nature of the developing child from infancy to age eight, the early childhood curriculum, the role of the teacher, and the effects of family and society on the learning child. Ms. Myers/Offered every year

Ways of Knowing Courses

Education and liberal arts faculty at Clark sponsor a set of interrelated courses organized around the theme “Ways of Knowing.” Each course in the series deals with the construction of knowledge in individual development, in academic disciplines, in schools, and in the society at large. Each course also focuses on a few fundamental themes or “big ideas” in the area, giving students a good grasp of what an important piece of “content” looks like in each domain. Courses look at leading ideas through different perspectives, including: the nature of knowledge in the area; the historical development of this knowledge; social and cultural ramifications; ways of working, thinking and using language in the area; comparison to other ways of knowing; and ways of learning and teaching in the area. Each course involves traditional in-classroom work, as well as observation, activities, and research in the field, either in classrooms or other learning settings. Co-taught by faculty from a variety of areas, as well as by master teachers from the Clark-Worcester Public Schools Professional Development School Collaborative.

282 WAYS OF KNOWING IN THE ARTS/LECTURE, DISCUSSION, FIELD PLACEMENT

Staff/Offered every year

283 WAYS OF KNOWING IN THE SOCIAL SCIENCES/ LECTURE, DISCUSSION, FIELD PLACEMENT

Staff/Offered every year

284 WAYS OF KNOWING IN THE HUMANITIES/ LECTURE, DISCUSSION, FIELD PLACEMENT

Staff/Offered every year

286 WAYS OF KNOWING IN THE PHYSICAL AND NATURAL SCIENCES/LECTURE, DISCUSSION, FIELD PLACEMENT

Staff/Offered every year

287WAYS OF KNOWING IN MATHEMATICS/ LECTURE, DISCUSSION, FIELD PLACEMENT

Staff/Offered every year

**288A PRACTICUM: ELEMENTARY
TEACHING/LEARNING**

Involves at least 300 hours of teaching/learning experience at a professional development school. Students will be supervised by education faculty and/or professional development school teachers. Staff/Offered every year

**288B SEMINAR: ELEMENTARY
TEACHING/LEARNING**

The aim of this field-based seminar is to foster reflective practice and deepen understanding of how to engage, support, sustain, and assess the learning of diverse students. Students will conduct rounds and develop and present a portfolio of their work which meets Massachusetts curriculum and teaching guidelines. Staff/Offered every year

**299 SEC. 1 DIRECTED READINGS —
UNDERGRADUATE**

Independent study for qualified students on a selected topic. Permission of instructor required. Offered for variable credit. Staff/Offered every year

**299 SEC. 2 DIRECTED RESEARCH —
UNDERGRADUATE**

Staff/Offered every year

299 SEC. 4 FIELD PROJECT — UNDERGRADUATE

Provides individualized and extended experiences in a wide variety of educational and human service agencies and institutions. Supervision is provided by the University and field agency personnel. Combines related seminars, conferences, and readings as a basis for critical analysis of the experiences within the context of applied theory and practice. Offered for variable credit. Staff/Offered every year

304 TEACHING AS RESEARCH SEMINAR I

Brings together urban school teachers (at the elementary, middle, and secondary level) with graduate students and faculty involved in university-based educational research. Focuses on qualitative, sociolinguistic research in classrooms, emphasizing the study of talk and texts as a vehicle for: better understanding students' learning, developing systematic techniques for describing and critiquing classroom activities,

and supporting effective learning among a socioculturally diverse population of students. Participants meet in small, facilitated groups to carry out qualitative research in urban classrooms and develop forums through which their work can be disseminated to a wider community of teachers and researchers. Staff/Offered every year

305 TEACHING AS RESEARCH SEMINAR II
See EDUC 304.

**306 CREATING LITERACY ENVIRONMENTS IN
ELEMENTARY SCHOOLS/SEMINAR**

Reviews recent studies reporting efforts to establish classrooms with varied opportunities for children to use language and literacy. Implications of this research for instruction are considered, and classroom practice is examined. Teams of students (e.g., a classroom teacher and a full-time graduate student, or two classroom teachers) identify and examine issues related to language and literacy use in classroom practice. Some students try novel methods and examine the effects of these innovations. Staff/Offered periodically

**308 LITERACY ACROSS THE
CURRICULUM/LECTURE, DISCUSSION, SEMINAR,
FIELD PLACEMENT**

See EDUC 208

**311 TEACHING AND LEARNING/ SEMINAR,
DISCUSSION**

Challenges the theory that there is one best way of understanding, that students must learn according to that one way, and that their capacity to learn ought to be judged accordingly. Explores many adequate pathways for developing knowledge and emphasizes that teachers who acknowledge and support different pathways help make learning more accessible for students. This premise and its implications for teaching, curriculum, assessment, the formation of learning communities for diverse groups of students, and the role of the teacher in enabling students to actively construct knowledge is explored. Mr. Del Prete/Offered every year

313 STUDIES IN MIDDLE SCHOOL TEACHING AND CURRICULUM/SEMINAR, DISCUSSION

Mr. Del Prete/Offered periodically

314 SELECTED TOPICS IN CHILDREN'S LITERATURE/SEMINAR, DISCUSSION

This course will immerse students in reading and writing about chapter books written for children and young adults. We will read as a class one to two books per week depending on length. Additional reading will be required for a class presentation and also for the final project. The bulk of the reading will be drawn from the Newbury Medal and honor award winners. This course will focus on reading, discussions and writing about children's/young adults' literature *as literature* rather than issues of teach-ability of age appropriateness.

Mr. Berninghausen/Offered periodically

324 BUILDING CONCEPTUAL BRIDGES/LECTURE, SEMINAR

Ms. Griffin/Offered periodically

325 RECENT THEORETICAL ADVANCES IN INTELLECTUAL DEVELOPMENT AND THEIR IMPLICATIONS FOR EDUCATION: A CASE STUDY FROM THE DOMAIN OF MATHEMATICS/LECTURE, SEMINAR

Studies contemporary theories in the field of intellectual development, their application to the domain of mathematical reasoning, and the general intellectual tradition (empiricist, rationalist, sociohistoric) and interpretive frameworks within which this work has been conducted.

The relevance of this work for understanding education in the U.S. today, and in suggesting directions for its improvement, will also be discussed. Ms. Griffin/Offered periodically

326A WAYS OF KNOWING SEMINAR

This yearlong, one unit seminar is designed to support M.A.T. students in developing an understanding of what it means to teach according to the ways of thinking, inquiring, writing and performing represented by each academic discipline in the context of diverse urban learning communities

326B WAYS OF KNOWING SEMINAR

This seminar engages MA students in deepening and demonstrating their understanding of

what it means to teach the academic disciplines in the context of diverse urban learning communities.

327 CULTURE, LANGUAGE, AND EDUCATION

Graduate-level course dealing with theories and practices relevant to teaching and learning within a sociocultural perspective. Questions about language and cognition, multicultural and social diversity in the classroom, curricular and pedagogical theories and practices, language and literacy development, bilingual education, access and equity, learning across the life span, and the politics of education are discussed. In all areas, analysis of language and communication is used as a key tool for critical understanding. Staff/Offered every year

343 ANALYSIS OF THE RESEARCH PROCESS/ LECTURE, DISCUSSION

Focuses on understanding the structure and intent of a research report. Careful analysis of existing educational research is explored.

Sources are considered in terms of particular elements in their overall structure, including hypothesis formation, operationalization of major terms, research design, etc. Mr. Zern/Offered periodically

348 STATISTICS IN EDUCATION/ LECTURE, DISCUSSION

Mr. Zern/Offered periodically

352 YOUNG CHILDREN AND THE ARTS

See EDUC 252.

360 LITERACY DEVELOPMENT/LECTURE, DISCUSSION, SEMINAR

See EDUC 260.

361 HUMAN DEVELOPMENT AND LEARNING

See EDUC 261.

362 MATH AND/OR EMOTION RESEARCH/SEMINAR

Ms. Griffin/Offered periodically

363 COGNITION AND INSTRUCTION/SEMINAR

Students will investigate the conceptual networks children construct for mathematical concepts, the instructional principles that underlie effective instruction, and the variety of methods that can be used to assess children's learning and development. Each student will con-

duct an independent research study on a topic of interest. Ms. Griffin/Offered periodically

364 KNOWLEDGE, DEVELOPMENT & INSTRUCTION/LECTURE, DISCUSSION, CLASS EXERCISES

See EDUC 264.

367 SEC. 1 CLINICAL EXPERIENCE AND SEMINAR I (ELEMENTARY)

367 SEC. 2 CLINICAL EXPERIENCE AND SEMINAR I (MIDDLE SCHOOL)

367 SEC. 3 CLINICAL EXPERIENCE AND SEMINAR I (SECONDARY)

Integrates at least 200 hours of focused field work with group professional development activities such as “rounds” and seminar discussion. Students will be mentored by education faculty and/or professional development school teachers as they broaden and deepen their understanding of particular approaches to curriculum (consistent with local, state, and national curriculum frameworks) and develop expertise in teaching practices (e.g., fostering and assessing literacy development) that engage groups of children, including children with special needs, in active and developmentally appropriate learning. This experience promotes students’ capacity to build and participate in a professional learning community reflecting on teaching, children’s learning, schooling, and education. For master’s students seeking standard teaching certification. Mr. Del Prete/ Offered every year

368 SEC. 1 CLINICAL EXPERIENCE AND SEMINAR II (ELEMENTARY)

368 SEC. 2 CLINICAL EXPERIENCE AND SEMINAR II (MIDDLE)

368 SEC. 3 CLINICAL EXPERIENCE AND SEMINAR II (SECONDARY)

Integrates at least 350 hours of fieldwork with group professional development activities such as “rounds,” seminar discussion, and teacher research. Students will be mentored by education faculty and/or professional development school teachers as they develop their teaching practice and understanding of children’s learn-

ing. Particular emphasis will be placed on ways to develop and support children as active thinkers, on providing multiple paths of learning for children in keeping with diverse needs and ways of knowing, and on creating and sustaining a responsive and responsible learning community. Students will frame and conduct a teacher research project to build understanding of some aspect of the teaching-learning process. For master’s students seeking standard certification. Mr. Del Prete/Offered every year

370A BECOMING AN EFFECTIVE MIDDLE SCHOOL EDUCATOR/LECTURE, DISCUSSION

See EDUC 270A.

370B BECOMING AN EFFECTIVE SECONDARY EDUCATOR/LECTURE, DISCUSSION

See EDUC 270B.

371 CULTURES OF AMERICAN SCHOOLS/LECTURE, DISCUSSION, SCHOOL VISITS

See EDUC 271.

372 FOCUSING ON A DISCIPLINE IN THE SECONDARY SCHOOL/LECTURE, DISCUSSION, FIELD EXPERIENCE

See EDUC 272.

373 SCIENCE AND SOCIETY

See EDUC 273.

377 FACILITATING TEACHER RESEARCH: ETHNOGRAPHIC AND SOCIOLINGUISTIC METHODS

Provides theoretical, methodological and applied research training to classroom teachers and graduate student/researchers interested in facilitating teacher research. Readings will include text: 1) about teacher research; 2) by teacher researchers; 3) about theoretical and empirical work on group discussion and the social formation of mind. In addition, participants will be involved in ongoing data collection and analysis of existing teacher research groups. Thus the forum will develop practical skills in group leadership as well as research skills in documenting and analyzing teacher research. This is an advanced seminar for people who have already participated in teacher research and/or facilitating teacher research groups. Permission of the instructor is required. Ms. Michaels/Offered periodically

378A PRACTICUM: MIDDLE SCHOOL TEACHING/LEARNING

Involves at least 300 hours of teaching/learning experience at a professional development school. Students will be supervised by education faculty and/or professional development school teachers. Mr. Del Prete/Offered every year

378B SEMINAR: MIDDLE SCHOOL TEACHING/LEARNING

The aim of this field-based seminar is to foster reflective practice, and to deepen understanding of how to engage, support, sustain, and assess the learning of diverse students. Students will conduct rounds and develop and present a portfolio of their work which meets Massachusetts curriculum and teaching guidelines. Mr. Del Prete/Offered every year.

379 PRACTICUM: SECONDARY EDUCATION

See EDUC 279. Worth 2 units. Mr. Zern/Offered every semester

382 WAYS OF KNOWING IN THE ARTS

See EDUC 282.

383 WAYS OF KNOWING IN THE SOCIAL SCIENCES

See EDUC 283.

384 WAYS OF KNOWING IN THE HUMANITIES

See EDUC 284.

386 WAYS OF KNOWING IN THE PHYSICAL AND NATURAL SCIENCES

See EDUC 286.

387 WAYS OF KNOWING IN MATHEMATICS

See EDUC 287.

388A GRADUATE PRACTICUM: ELEMENTARY TEACHING/LEARNING

See EDUC 288A.

388B GRADUATE SEMINAR: ELEMENTARY TEACHING/LEARNING

See EDUC 288B.

391 THESIS RESEARCH

Individual research related to the doctoral dissertation. Students meet with members of their dissertation committee for assistance with their

dissertation study. Advising conferences are scheduled as needed by the individual student with committee members. The chair of the dissertation committee coordinates the advising process. Offered for variable credit to be determined by the dissertation chair. Staff/Offered every year

399 SEC. 1 DIRECTED READINGS — GRADUATE

Independent critical analysis of literature related to individual research. Offered for variable credit. Staff/Offered every year

399 SEC. 2 DIRECTED RESEARCH — GRADUATE

Individual research with direction from an instructor. Offered for variable credit. Staff/Offered every year

ENGINEERING

Program Committee

Charles C. Agosta, Ph.D., *committee chair: physics*

Lee Rudolph, Ph.D.: *mathematics, computer science*

Alan A. Jones, Ph.D.: *chemistry*

The Undergraduate 3/2 Engineering Program

The 3/2 engineering program at Clark University is a five-year program offered in conjunction with several affiliated schools. Currently these schools are Columbia University, Washington University, and Worcester Polytechnic Institute. Students enrolled in this program complete three years in residence at Clark followed by two additional years at one of the engineering schools. Students completing the program receive a B.A. degree from Clark and a B.S. degree in engineering from the affiliated school. Information about the 3/2 Program can be found at the department's Website, <http://physics.clarku.edu>.

At Clark, students major in a field that strongly overlaps the entrance requirements for the engineering school. Appropriate majors include chemistry, computer science, environmental science and policy, mathematics, physics, and a self-designed liberal-arts/engineering major. At the engineering school, students may major in any of the fields they offer. In addition to the traditional engineering fields taught at all schools, unique programs such as engineering and public policy, biomedical engineering, system science and engineering, and fire protection engineering are also available. Please consult the program chair for further information.

While the program is open to all Clark students, the required curriculum must be started during the first year of study to permit the timely completion of all requirements. Those students whose high school background (as determined by placement examinations) has not prepared them to enter calculus (Mathematics 120) and composition (English 020) during their first semester must attend summer school to complete the requirements on time. All students intending to pursue the program are required to notify the program chair of their intent at the beginning of their first year and to choose their courses each semester in consultation with committee members.

Students are encouraged to seek a major advisor who is familiar with the program and to seek the advice of members of the 3/2 Engineering Committee. Sample curricula for appropriate majors can be obtained from the committee chair or on the Clark Website. Students intending a self-designed liberal arts/engineering major may wish to use the 3/2 Engineering Committee as their major advisory committee.

Requirements

In addition to the requirements of the Program of Liberal Studies and of their major at Clark (indicated elsewhere in this catalog), students must meet the entrance requirements of the engineering school. These requirements, which are essentially the same for all schools, can be found on the Clark Website. Detailed questions concerning individual schools can be discussed with committee members.

The additional Clark requirements for the liberal arts major and for the Program of Liberal Studies must be met concurrently with the above requirements. Several majors require additional summer school work at Clark or advanced placement standing to complete all requirements within the three-year period in residence at Clark. Students who complete a full year of study at the engineering school and who have completed all of Clark's requirements are eligible for the B.A. at the end of the fourth year of study.

Enrollment at the Engineering School

Students submit a formal application for admission to the engineering school through the 3/2 Engineering Committee during their junior year. Students receiving a positive endorsement from the committee normally can expect admission for enrollment as juniors at the engineering school in the following September. Application for financial aid is made at the same time, and those students receiving financial aid can expect to be supported at levels that are generally consistent with the level of Clark's support during the first three years. However, only Washington University awards financial aid to foreign students, who must rely on other sources of funds while at Columbia or WPI.

Students intending to enroll at WPI should apply as sophomores and may enroll in some engineering courses during their second or third year while still at Clark. Washington University encourages prospective students to enroll in one of their intensive January courses between Clark's first and second semesters.

ENGLISH

Department Faculty

SunHee Kim Gertz, Ph.D., *chair: Chaucer, medieval literature, comparative literature, semiotic theory, women's studies*

John J. Conron, Ph.D.: *American literature, American landscape, American culture, fine arts*

Imraan Coovadia, Ph.D.: *18th- and 19th-century novel and poetry, creative writing, literary history*

James P. Elliott, Ph.D.: *American literature, literary theory, textual editing*

Fern L. Johnson, Ph.D.: *sociolinguistics, feminist linguistics, communication and culture*

Winston Napier, Ph.D.: *African American literature, critical theory*

Heather Roberts, Ph.D.: *American literature, popular culture, gender studies*

Stanley Sultan, Ph.D.: *modernist literature, literary theory, politics and literature*

Virginia M. Vaughan, Ph.D.: *Shakespeare, English Renaissance literature; post-colonial appropriations of Shakespeare*

Department Instructors

Louis Bastien, Ph.D.

Barbara Blatner, D.A.

Timothy Connolly, M.A.

James Dempsey, M.A.

Diane Moul, Ph.D.

William G. Tapply, M.A.T.

Lucilia Valerio, Ph.D.

Adjunct Faculty

William Ferguson, Ph.D., *associate professor of Spanish*

Bernard Kaplan, Ph.D., *professor emeritus of psychology*

Visiting Faculty

Lawrence L. Langer, Ph.D., *Strassler Distinguished Visiting Professor in the Strassler Family Center for Holocaust and Genocide Studies*

Emeriti

Jessie C. Cunningham, Ph.D.

Serena Hilsinger, Ph.D.

Writing Program

Anne Ellen Geller, Ph.D., *Director*

Undergraduate Major

The program is primarily designed to meet the needs and interests of English majors and minors, although the variety of courses we offer may also appeal to other students as well. We aim to assist students in developing skills in close reading, critical thinking, and effective writing, as well as in acquiring knowledge and experience valuable to any vocation.

Moreover, the program encourages the development of a sense of cultural history, a sensitivity to literary values, and a first-hand knowledge of important authors, works, and periods of literature in English.

We advise English majors to take two year-long historical sequences early on in their programs. Any student majoring in English only should also select—in consultation with his or her advisor—a suitable area of specialization drawing on courses, both inside and outside the English Department (see below).

Majors and minors should note that some courses fulfill more than one requirement. Requirements may also be fulfilled through an arrangement with the Worcester Consortium of Higher Education at Assumption College and the College of the Holy Cross. For those interested in studying abroad, majors and minors should contact the Office of Study Abroad Programs regarding our partner program at the University of East Anglia.

For these and other aspects of the program, we strongly urge majors and minors to consult with their advisors.

The English Department is an active member of Clark's Higgins School of the Humanities and encourages students to participate in the school's events and opportunities.

Program for English Majors

Nonrequired Preparatory Courses:

IDND 018 Expository Writing/Workshop

019 The Essay: Reading and Writing/Workshop

020 Introduction to Literature and Composition/Discussion

Core Requirements

A. Historical Sequence

The four courses used to satisfy this requirement must include either the entire sequence 140 and 141 or the entire sequence 180 and 181.

1. Each major must take at least 2 of the following 4 courses:

- 133 Survey of Women Writers I
- 140 Major British Writers I
- 180 Major American Writers I
- 182 African American Literature I

2. Each major must take at least 1 of the following 4 courses:

- 134 Survey of Women Writers II
- 141 Major British Writers II
- 181 Major American Writers II
- 183 African American Writers II

B. Genre Courses

1. Each major must take one of the following courses:

- 109 Anatomy of Poetry
- 110 English Poetry I
- 111 English Poetry II
- 184 American Poetry

2. Each major must also take one of the following courses:

- 135 The Short Story OR
- 144 Drama of the Western Tradition

C. Period Requirements

1. Each major must take two courses of literature before 1700, one of which must be at the 200-level, such as: 140 Major British Writers I; 250 Medieval Literature Seminar; 251 Chaucer; 253 Advanced Shakespeare; 254 Still Spaces-East Meets West; 255 Studies in the Renaissance; and 294 History of the English Language.
2. Each major must take one 200-level course of literature between 1700 and 1900, such as: 247 Wordsworth and his Circle; 263 British Romantic Literature; 265 Victorian Literature; 280 Early American Pop Culture; 281 American Literary Renaissance; 283 Visions of Representation 1860-1920; and 282 Studies in 19th -Century American Literature.
3. Each major must take one 200-level course of literature after 1900, such as: 272 Joyce

and Lawrence; 274 W. B. Yeats; 278 Modern Political Literature; 286 American Modernisms; 289 Post-Modern Landscapes; 293 Studies in Landscapes; and 291 Harlem Renaissance.

D. Seminar on Criticism

Each major must take one 200-level seminar in the theory of practice of criticism, such as: 20th-Century Critical Methods; 242 Feminist Critical Theory; 244 Interpretation of Dreams; 248 Contemporary Literary Theory; 249 Signs and Crossroads: Semiotic Theory and Practice; 281 American Literary Renaissance; 340 Introduction to Graduate Study; and Comparative Literature 251 Seminar in Literary Criticism

E. 200-level Courses

Every major's program must include at least 4 courses at the 200 level in English in addition to the required seminar in criticism (D above). A student may count any of the courses listed under Comparative Literature toward the English major, which, however, must be approved by the student's advisor in the English Department as being related to the student's overall program of English studies. The 200-level courses of the Comparative Literature program such as Comparative Literature 240 and 241 are especially recommended.

F. Capstone Requirement

All English majors must take the 290 Capstone course during their senior year. The course aims to deepen and broaden the English major's knowledge and interpretive sensitivity while helping to prepare her or him for graduate school or professional life.

G. Area of Specialization

As early as possible, in combination with an advisor, the English major should select an area of specialization (at least 6 courses, 4 of which are typically fulfilled by core courses in the major).

Descriptions of areas of specialization with lists of required and recommended courses are available from the department.

Areas of specialization include literature written before 1700, 18th- and 19th-century

literature, and 20th-century literature. The Department also offers areas of specialization in communication studies, education, and women's studies. With at least two members of the Department faculty, English majors may design their own areas of specialization.

Students may substitute a second major, University concentration, or a minor for the area of specialization as long as they demonstrate links between the English major and the substituted area of study through one of their courses.

Requirements for an English Minor

A minor provides a student majoring in another department with general background in English literature, as well as with skills in critical reading and writing. Ordinarily, the chair acts as advisor to minors. The minor in English requires at least six English courses, not including English 20 Introduction to Literature and Composition, as follows:

1. One course in poetry
2. One historical sequence (two courses) from the following:
 - 133-134 Fiction By Women Writers
 - 140-141 Major British Writers
 - 180-181 Major American Writers
 - 182-183 African American Literature
3. One seminar in criticism from the following:
 - 240 20th-Century Critical Methods
 - 242 Feminist Critical Theory
 - 248 Contemporary Literary Theory
 - 249 Signs and Crossroads: Semiotic Theory and Practice
 - 281 American Literary Renaissance
 - 340 Introduction to Graduate Study in English
4. At least two other English courses, one of which must be a 200-level seminar.

Honors Program

At the end of their junior year, students in whom the faculty have expressed confidence will be invited to work on a year-long Honors thesis during their senior year. Other students who wish to take Honors in English should identify an area of interest, consult with an appropriate Honors advisor, and apply to the

Department chair before the end of the junior year. See 292 Honors in English for details.

Scholarly Research Program

Every year the prestigious American Antiquarian Society, a national research library of American history located in Worcester, offers seminars in specialized topics of interest to those studying American literature. Please consult with Professors Conron, Elliott, or Roberts for more information.

Internship Opportunities

In cooperation with the University's internship office, the English Department supports internships for juniors and seniors. Internships are available both in university offices and beyond the campus—for example, newspapers, news departments of radio and television stations, periodical and book publishers, and communication departments. Please consult with the chair for further information.

Health Professions

In an effort to enhance students' opportunities for entrance into medical, dental, and veterinary schools, the Premedical and Predental Advisory Committee has a special arrangement with the English Department, allowing them to major in English while meeting the specific requirements of medical schools. If interested, please consult the chair.

Study Abroad

The English Department has a special arrangement with the University of East Anglia in England. For information, please consult with the chair or with the University's Office of Study Abroad Programs.

Graduate Program

The program leading to the Master of Arts degree in English encourages both innovative, individually designed approaches of study as well as traditional approaches to literature. The controlled size of the program fosters an atmosphere of intensive intellectual exchange among faculty and students. Teaching assistantships with tuition remission plus stipend and full- and part-time tuition remission scholarships

are available on a competitive basis. For the Master of Arts, the student must satisfactorily complete at least eight upper-level courses or seminars, which include 340 Introduction to Graduate Study, and 397 Master's Thesis. Graduate students will receive 300-level designations for graduate-level coursework in those 200-level courses deemed suitable for graduate credit and for which they are expected to complete extra graduate requirements. Students are also required to register for and participate in 390 Departmental Colloquium (no course credit), where they will present working drafts on some aspect of their thesis topics. In addition to completion of the master's thesis (397), the student must pass a final oral examination.

Writing Program

Writing courses, limited in size to ensure attention to each student, are listed as "Interdepartmental/Nondepartmental (IDND)" because the teaching of writing at Clark is considered the responsibility of the entire faculty, not of any one department. Verbal expression courses are listed in various departments.

IDND 018 EXPOSITORY WRITING/WORKSHOP

Centered on student writing, this course teaches the writing process, emphasizing revision. Students write informal exercises and essays. Course required of some students. Staff/Offered every semester

Department Courses

019 THE ESSAY: READING AND WRITING/WORKSHOP

Students will read and consider contemporary essays, and will write a variety of different types of essays, from academic and argumentative essays to more familiar, exploratory essays. Meets the verbal expression requirement. This course emphasizes revision. Ms. Geller/Offered every other year.

020 INTRODUCTION TO LITERATURE AND COMPOSITION/DISCUSSION

Students read and write about basic elements of poetry, fiction, and drama. Small classes and limited reading lists help establish an atmos-

phere conducive to significant class discussion; emphasis is placed on writing effectively about literature. Meets the verbal expression requirement and is strongly recommended for prospective English majors. No student may take more than one section of English 020 for credit. Staff/Offered every semester

021 LITERACY, LEARNING, WRITING

What is literacy? Is it more than reading and writing? How should it be taught, and who should learn? This class will introduce students to the challenging questions that inform contemporary literacy studies. In the first part of the course, students will read histories and theories of literacy. As the course proceeds, students will also think about their own literacies by constructing literacy autobiographies. Finally, by taking part in a community literacy project, students will reflect on their own roles as they engage with the literacies of their communities. Meets the verbal expression requirement. Ms. Geller/Offered every other year.

101 COMMUNICATION AND CULTURE/LECTURE, DISCUSSION

Examines the ways in which communication creates and represents ideology, social orders, and cultural identities. Emphasis is on critical analysis of communication in contemporary society. Subjects vary, with emphasis on the cultural dimensions of discourse and media. Ms. Johnson, Staff/Offered every year

105 NEWS WRITING/WORKSHOP

Covers the basics of news writing, from reporting an event to writing an obituary. Students learn how to collect information, conduct interviews, and organize writing into crisp news copy. Class work includes weekly deadline writing assignments. Homework: weekly writing exercises based on textbook examples and field assignments, as well as readings from texts and daily newspapers. Prerequisites: verbal expression course. First-year students by permission. Mr. Connolly/Offered every year

106 CREATIVE WRITING: FICTION/WORKSHOP

For students who are inspired to write short or long stories (including novels). Equal emphasis on writing well and creating boldly, with

focus on giving and receiving criticism in the workshop format. Students will be encouraged to “find their voices” by experimenting with style, genre and structure. Prerequisite: a grade of B or better in English 019, 020, 021, or permission of the instructor. Mr. Tapply/Offered every semester

109 ANATOMY OF POETRY/FIRST-YEAR SEMINAR

Many species communicate and therefore have languages, whether of sounds, or gestures, or both. But only humans are able to control language; for example, only a human can hear or read something never said or written before, and understand it. Literature is art made by relying on this human quality, and poetry is the genre of literature most constituted of particular words. This is a seminar devoted to intensive study of poetry. The class will read and discuss poems in English from the Middle Ages to our own age, by poets of different nationalities, genders and races. This seminar satisfies the poetry requirement for the English major and fulfills the verbal expression requirement. Mr. Sultan/Offered periodically

110 ENGLISH POETRY I/LECTURE, DISCUSSION

Focuses on the development of the most important forms, themes, and movements in English poetry. This course, required for the English major, emphasizes intensive study and discussion of individual poems. It includes a series of essays on assigned topics, and a sequence of poetry-writing exercises designed to enhance understanding of the demands of poetry form. Fulfills the verbal expression requirement. Strongly recommended for English majors in the first or second year; seniors by permission. Ms. Blatner/Offered every semester

111 ENGLISH POETRY II/LECTURE, DISCUSSION

Sequel to English Poetry I. Poetry by Yeats, Dickinson, Wordsworth, Milton, and a group of Renaissance lyric poets is studied in that order (reverse chronology). Relevant issues in the contexts and art of poetry are considered. Prerequisite: a poetry course. Mr. Sultan/Offered every year

113 LITERATURE OF BASEBALL/FIRST-YEAR SEMINAR

This course, which fulfills a VE requirement, will focus on the history of writing about baseball. This game has captured writerly imaginations virtually from its inception — Walt Whitman and Mark Twain wrote about it in the 19th century, Updike and Damon Runyon in the 20th, for example. Using a new anthology from the Library of America, we will explore the many ways American authors have seen the game as a metaphor for American experience and, particularly since the advent of TV broadcasts, have “worshipped at the Church of Baseball.” Five short papers required, plus a creative piece about the student’s participation in or spectatorship of the game. Mr. Elliott/Offered periodically

120 INTRODUCTION TO SHAKESPEARE/LECTURE, DISCUSSION

Designed for any student who wants an introduction to Shakespeare. Seven major plays are read and discussed in detail with an emphasis on performance. Ms. Vaughan/Offered every year

133 SURVEY OF WOMEN WRITERS I/LECTURE, DISCUSSION

Examines how women writers before 1900 address, confront, avoid, subvert and question traditional notions of gender, culture, domesticity, history, ethnicity, and sexuality. Close attention is paid to textual reading, the historical and intellectual context of works, and different critical approaches to women’s writing. Authors include Behn, Burney, Austen, Sedgewick, Chopin, Gilman, Foster and Wilson. Prerequisite: VE course. Ms. Valerio/Offered every other year

134 SURVEY OF WOMEN WRITERS II/LECTURE, DISCUSSION

Examines developments in British and American prose fiction by women in the 20th century. Authors include Cather, Woolf, Lessing, Rhys, Gordiner, Morrison, Winterson, Cisneros, and Kincaid. Close attention is paid to textual reading, and defining, revising and challenging traditional definitions and expect-

tations of women's writing on various levels: thematic, linguistic, and formal. The course also addresses current critical approaches to women's writing. Prerequisite: VE course. Ms. Valerio/Offered every other year

135 THE SHORT STORY/LECTURE

This course involves intensive reading of stories that exemplify a variety of fictional methods and affords the student some knowledge of the history of this literary type. Attention will be paid to the international scope of the short story, particularly in the 20th century.

Mr. Elliott/Offered every year

140 MAJOR BRITISH WRITERS I/LECTURE, DISCUSSION

The lecture/discussion sequence 140-141 takes a historical approach to British literature from the Middle Ages to the dawn of the twentieth century. This course concentrates on medieval and early modern English literature (1000-1700); it will examine the cultural and literary construction of the hero and the lover in the writings of the Beowulf poet, Chaucer, Sidney, Spenser, Donne, Wroth, and Milton (among others). Ms. Vaughan/Offered every year

141 MAJOR BRITISH WRITERS II/LECTURE, DISCUSSION

This course examines British literature by major authors from 1700 to the late nineteenth century, concentrating on urban representation and the urban sensibility as expressed in drama, the novel, poetry and prose nonfiction. It will use the idea of the city for an exploration of what it means to be modern. Texts to be studied will include works by Wycherly, Congreve, Centlivre, Addison, Steele, Johnson, Smollett, Montagu, Baillie, Blake, Wordsworth, Dickens, Bronte and Marsh. Mr. Coovadia/Offered every other year

144 DRAMA OF THE WESTERN TRADITION/LECTURE, DISCUSSION

Surveys the traditional dramatic canon of the western tradition. Course readings will include plays by Sophocles, anonymous writers of the medieval cycles and morality plays, Marlowe, Shakespeare, Webster, Jonson, Molière,

Congreve, and Sheridan. Ms. Vaughan/Offered every other year.

150 INTRODUCTION TO MEDIEVAL LITERATURE/LECTURE, DISCUSSION

Introduces western European medieval literature, touching on classical roots and contemporary counterparts in the process. Topics covered may include literary forms (epic, romance), social concerns (religion, the role of women, politics), and myth. Works read and discussed are selected from Anglo-Saxon, Anglo-Norman, Celtic, and Middle English authors, and range from Beowulf and Marie de France's *Lais* to the Gawain-poet and Chaucer. Mr. Bastien/Offered every year

163 AMERICAN GOTHIC/LECTURE, DISCUSSION

Studies the emergence and evolution of the American gothic tradition, exploring the psychological, social and political uses of the gothic mode in a range of different genres. The semester begins with the works of Anne Radcliffe, Matthew "Monk" Lewis, and a brief overview of the 18th-century English gothic tradition, then crosses the Atlantic to examine the American heirs of this tradition. Nineteenth-century authors surveyed include Charles Brockden Brown, Edgar Allan Poe, Louisa May Alcott, Nathaniel Hawthorne, and Charlotte Perkins Gilman. The course ends with an exploration of gothic elements in the works of several 20th century writers and filmmakers, including Toni Morrison, Stephen King, Wes Craven and Todd Haynes. Ms. Roberts/Offered every other year

168 CONTEMPORARY FICTION/SEMINAR

Considers a number of classics of contemporary literature, focusing particularly on writing which expands and transforms the nature of the modern novel. The novels have been chosen on the basis of their experimental use of literary form, as well as for their ingenious responses to scientific knowledge, philosophical argument, political rhetoric, and romantic convention. Alongside their engagement with fiction, students will be asked to assess the validity of a variety of recent or "post-modern" theoretical schemes. Mr. Coovadia/Offered periodically

180 MAJOR AMERICAN WRITERS/LECTURE, DISCUSSION

The sequence 180-181 takes a historical approach to American literature from Puritanism to the present. This course concentrates on early American literature, circa 1620-1860, with texts by Edwards, Rowlandson, Franklin, Douglass, Emerson, Dickinson, Whitman, Hawthorne, Melville, Stowe, and others are read. Prerequisite: verbal expression course recommended. Ms. Roberts/Offered every year

181 MAJOR AMERICAN WRITERS/LECTURE, DISCUSSION

Concentrates on the evolution of American literature from circa 1860 to the present. Texts by such writers as Whitman, Twain, Howells, Dickinson, Jewett, Crane, James, Frost, Eliot, Faulkner, and Hemingway are read. Prerequisite: verbal expression course. Mr. Conron/Offered every year

182 AFRICAN-AMERICAN LITERATURE I/LECTURE, DISCUSSION

Addresses the major periods and principal authors of the African-American literary canon from the 18th and 19th centuries. Students examine works of such writers as Olaudah Equiano, Phillis Wheatley, Frank Webb, Harriet Jacobs, and Frances Harper. Students are expected to gain a chronological, as well as a culturally contextual, understanding of African American literature. An analysis of the dominant themes, moods and aesthetic assumptions often indicative of black American literature is stressed. Mr. Napier/Offered every year

183 AFRICAN-AMERICAN LITERATURE II/LECTURE, DISCUSSION

Explores the aesthetic modes configuring the evolution of African-American literature in the 20th century, especially the novel. Writers studied include Toomer, Johnson, Hughes, Hurston, Wright, Ellison, Baraka, Morrison, Bambara and Naylor. Mr. Napier/Offered every year

184 AMERICAN POETRY/DISCUSSION

Concentrates on the differing experiences of the natural environment defined by narrative, incantational, and meditative poetry. The poetry studied includes the Navajo Night Chant and the work of Gary Snyder, Derek Walcott, Mary Oliver, Pat Mora, and others. The course teaches and requires knowledge of the art of the image, the image sequence and the music of 20th-century American poetry. Mr. Conron/Offered periodically

196 ORAL ADVOCACY/LECTURE, WORKSHOP

Centers on oral presentation of controversial issues and response to rhetorical dilemmas. Topics include: rhetorical situations and audience analysis; forms of argument in persuasive speaking; development of arguments with evidence; and ethical communication practices. Students prepare three major speeches and complete a number of exercises. Ms. Johnson/Offered every other year

202 FEATURE WRITING I/WORKSHOP

An introduction to the art and craft of feature writing. The feature story is a rendering of reality into words, which, when done well, has its feet in both journalism and literature. We will discuss the elements of the feature story as well as its various types and formats. We will learn how to find and develop stories, how to perform background research on subjects and how to interview. Course work will include reading and discussing feature stories and assigned texts. Students' stories will be read and discussed in class. Prerequisites: verbal expression course; first-year students by permission. Mr. Dempsey/Offered every year

203 FEATURE WRITING II/WORKSHOP

Develops the skills learned in Feature Writing I and leads students toward publication of their work. We will study various outlets for feature stories and hear from editors and writers on breaking into markets. We will examine other forms of writing for techniques such as narrative, description, exposition and dialogue that may be put to use in own work. Libel and

ethics will also be covered. Students should expect some demanding assignments. The aim is to produce pieces vibrant with the energy of the real. Prerequisites: Feature Writing I or permission. Not open to first-year students. Mr. Dempsey/Offered every year

215 LANGUAGE AND CULTURE IN THE U.S./LECTURE, DISCUSSION

Using a cultural perspective on language, addresses varieties of language use in the U.S. Topics include demographics in sociolinguistic perspective; the history of American English; language and culture of African Americans, Asian Americans, Hispanic Americans; gender patterns in language; bilingualism and multilingualism in the U.S.; and the policy implications of language diversity. Ms. Johnson/Offered every year

240 20TH-CENTURY CRITICAL METHODS/SEMINAR

Examines the primary movements in 20th-century European and American literary criticism and critical theory. Beginning with the Formalist School and moving through New Criticism, the Marxist School, Structuralism, the Black Arts Movement, Feminism, Deconstruction and other manifestations of poststructuralism, investigates the philosophical assumptions that have reconfigured contemporary literary studies away from mere explication toward a concern with the epistemological, cultural, and ideological groundings of the text. Mr. Napier/Offered every year

242 FEMINIST CRITICAL THEORY/SEMINAR

Focuses on the canon of postmodern feminist literary theory produced by the African-American feminist/womanist school, the *écriture féminine* school, the Lacanian/Freudian school, and the American generalist school. Target issues include authorial power and revisionary identities, body as text, deconstruction as feminist practice, principles of psycho-political liberation, racialized gender, and resistance to the universalizing traditions of phallogocentrism. Mr. Napier/Offered periodically

244 INTERPRETATION OF DREAMS: MYTHICAL THOUGHT/SEMINAR

Deals with the exposition, application, and critical evaluation of various systems for the interpretation of dreams and other products of the imagination (poetry, art, mythology). Included for examination are the theories of Freud, Jung, Boss (phenomenological), May (existential), and Burke/Kaplan (genetic-dramatism), as well as the philosophical views of Ernst Cassirer, in the second volume of his *Philosophy of Symbolic Forms*. Problems of validity of interpretation are discussed, and the relation of dream interpretation to the interpretation of other products of the imagination (e.g., art, poetry) is examined. Open only to seniors and graduate students. Fulfills the criticism requirement. Permission of instructor required. Mr. Kaplan/Offered Fall 2002

247 WORDSWORTH AND HIS CIRCLE/SEMINAR

This course will conduct an examination of British Romantic poetry focusing on William Wordsworth and Wordsworth's friends, antagonists, interpreters, and inheritors in particular Coleridge, Hazlitt, Shelley, Keats, and Byron. The course will address topics such as the structure of a poetic career, the relationship between poetry and a modern or commercial culture, the status of poetic language, and the nature of Romantic egoism. Students will also examine secondary texts which consider Romanticism's political, aesthetic, and critical contexts. Mr. Coovadia/Offered periodically

248 CONTEMPORARY LITERARY THEORY/SEMINAR

Investigates and develops several theoretical approaches to literature in the late 20th century, attempting to provide glimpses into the range of theoretical issues and concerns. May also look at a literary text in relation to theory. General areas of study are selected from among the following: textual criticism, new criticism, psychoanalysis/reader response, structuralism, poststructuralism, feminism, post-colonialism, postmodernism, gay and lesbian theory. Mr. Elliott/Offered every year

249 SIGNS AND CROSSROADS: SEMIOTIC THEORY AND PRACTICE/SEMINAR

Approaches semiotic theories comparatively from historical as well as theoretical points of view and practices them by drawing on literature, film, advertising, and drama. Ms. Gertz/Offered periodically

250 MEDIEVAL LITERATURE/SEMINAR

Explores medieval literary culture of Western Europe by means of literary theoretical and classical texts. Ms. Gertz/Offered periodically

251 CHAUCER/SEMINAR

Guides the student through *Book of the Duchess*, *The House of Fame*, *The Parlement of Fowls*, some *Canterbury Tales*, and *Troilus and Criseyde*. All texts are taught in Middle English, and selections may vary. (No prior knowledge of Middle English required.) Ms. Gertz/Offered periodically

253 ADVANCED STUDIES IN SHAKESPEARE/SEMINAR

Explores recent trends in research and criticism of Shakespeare's texts. Topics and focus vary from year to year, but include feminist, new historicist, and cultural materialist interpretations, performance criticism, and theater history. Ms. Vaughan/Offered every year

254 STILL SPACES—EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM/SEMINAR

This course aims to explore and gain experience of contemplative practices as they have evolved in both European and Asian cultures. In addition to reading and writing about key texts that engage the "still space," outside the classroom, students will participate in a yoga course for seven weeks. The concepts of *ki* (centeredness) and *tao* (the way) will be probed through the tools of the metaphor and the narrative. Ms. Gertz/Offered periodically

255 STUDIES IN THE RENAISSANCE/SEMINAR

Explores the poets, playwrights, and prose writers who shaped the English literary Renaissance. Ms. Vaughan/Offered every other year

256 SHAKESPEARE FROM PAGE TO STAGE/LECTURE, WORKSHOP

Using *The Tempest*, *Twelfth Night*, *Macbeth* and *Othello*, this course will provide historical context for understanding Shakespeare's texts, exposure to close analysis of Shakespeare's language (from both poetic and performance perspectives), as well as experience in acting Shakespearean roles. Students will be required to rehearse and perform scenes and monologues from four plays, concentrating on heightened language while maintaining the illusion of the first-time experience. Simultaneously, students will explore the texts' historical contexts, looking in particular at early modern constructions of gender, kinship, social status, and race. Ms. Vaughan and Mr. DiIorio/Offered periodically

257 LANGUAGE AT ISSUE/SEMINAR

Centers on current language issues in the United States. Focuses on issues such as ebonics, language translation in the legal process, bilingual education and efforts to make English the "official" language of the U.S. Issues are considered from the perspective of academic scholarship, media representations, legislative actions, and legal perspectives. Ms. Johnson/Offered periodically

259 19TH-CENTURY COMEDY/LECTURE, DISCUSSION

Students will examine the least understood of literary genres, that is, comedy. The 19th-century was the golden age of comedy in the English language, from the precise satire of Jane Austen to the accelerated word play of Oscar Wilde and the surrealist wit of Lewis Carroll. Students will be introduced to the variety of comic material which became available in the period: novel of manners, ballad, musical theater, fictionalized autobiography, children's tale, and fabliau. In addition the logic (or, better, illogic) of humor will be addressed, primarily by a series of reports on theoretical analysis of comedy. Mr. Coovadia/Offered every other year.

261 LITERATURE OF THE COLONIES/SEMINAR

Allows students to examine the substantial body of imaginative writing concerning the British commonwealth composed in the 19th and 20th centuries. Topics covered will include contemporary representations of cultural difference, distinctions between domestic and colonial society, the presentation of indigenous and British women in the imperial period, and the empire's changing ideologies and codes of behavior. Intended for advanced undergraduates and graduate students, with some experience of the Romantic and Victorian periods. The genres covered include the novel, essay, verse, short story, and political oratory. Mr. Coovadia/Offered every other year.

263 BRITISH ROMANTIC LITERATURE/SEMINAR

Examines British Romantic literature from philosophical, social, and critical perspectives. Romantic authors such as Wordsworth, Coleridge, Byron, Keats, Mary Shelley, DeQuincey, Burns, and Blake will be studied to uncover what the Romantic sensibility is and how it relates to nature, the self, and society. Mr. Coovadia/Offered periodically

265 VICTORIAN LITERATURE/SEMINAR

Authors studied may include Charles Darwin, Charles Dickens, Alfred Tennyson, John Stuart Mill, Charlotte Brontë, Thomas Hardy, and Oscar Wilde, and less familiar but important people such as Henry Mayhew and Harriet Taylor. Mr. Coovadia/Offered periodically

271 VOICES FROM THE HOLOCAUST: TESTIMONY, LITERATURE, ART/SEMINAR

Explores how survivors, writers, and artists develop oral, written and visual languages for gaining access to the complex nature of the Holocaust experience. We will begin by establishing a historical context, especially through readings of eye-witness accounts of life and death in the Warsaw, Kovno and Lodz ghettos, examining oral survivor testimonies, and viewing portions of Claude Lanzmann's film *Shoah*. But the main focus of our investigation will be on efforts of the literary and artistic imagina-

tion to find ways of representing and therefore communicating an ordeal that many continue to call unimaginable. Mr. Langer/Offered Fall 2002

272 JOYCE AND LAWRENCE/ SEMINAR

Introduces the art of the two writers. Poems, short stories, and novels by both are studied. Mr. Sultan/Offered every year

274 W.B. YEATS/SEMINAR

Studies the accomplishments of Yeats. The principal concern is his poetry, but attention is given to his dramatic and other writings. Also studied are his thoughts and beliefs along with his cultural role in Ireland and the world during his time. Prerequisite: either a poetry course or permission of the instructor. Mr. Sultan/Offered periodically

277 RACE AND GENDER IN AFRICAN-AMERICAN LITERARY THEORY/DISCUSSION

Covering the development of African-American literary theory from the 1970s to the present, this course will examine the ways in which prevailing assumptions of race and gender have influenced the theoretical statements on literary aesthetics and culture produced by African-American intellectuals. Various schools of thought as represented by these theorists include cultural nationalism, structuralism, feminism, poststructuralism and masculine studies. Mr. Napier/Offered every year

278 MODERN POLITICAL LITERATURE: CLASS, RACE, GENDER, ETHNICITY/SEMINAR

Covers political fiction, poetry, and plays of the past century, principally in the U.S., Great Britain, Ireland, France, Germany, Czechoslovakia, Spain, and certain African and Latin American countries. Works advocating and attacking political formulations about class, nationality, race, and sex are studied. No prior knowledge of politics or political theory is necessary. Mr. Sultan/Offered periodically

280 EARLY AMERICAN POP CULTURE/SEMINAR

Traces the emergence and development of various popular forms in America in the antebellum period. Examines popular fiction genres

such as the sketchbook, the domestic novel, the gothic city mystery, the melodrama, and the historical romance alongside non-fictional texts such as almanacs, broadsides, penny papers and etiquette manuals. Analyzes how these emerging popular media challenged the cultural authority of traditional institutions such as the church, and will examine the role played by such forms in creating and maintaining the perceived distinctions between men's and women's spheres of social influence and between lowbrow and highbrow culture. Specific authors covered may include Benjamin Franklin, James Fenimore Cooper, Maria Cummins, Washington Irving, George Lippard, Susannah Rowson, E.D.E.N. Southworth, Harriet Beecher Stowe, Royall Tyler, Susan Warner, and Michael Wigglesworth. Ms. Roberts/Offered every other year

281 AMERICAN LITERARY RENAISSANCE/SEMINAR

Focuses on the turbulent decades of the 1850s and the manner in which this period has been framed by 20th-century critics as the era of America's literary "flowering." After examining F. O. Matthiessen's seminal thesis, we will read a number of critical essays questioning the literary and political assumptions that helped canonize certain of the period's writers while excluding others. Reading works by major writers such as Dickinson, Hawthorne, Melville, Douglass, and Stowe, we will explore how these writers' dialogues with one another shed light on the debate over how we should read them today. Ms. Roberts/Offered every year

282 STUDIES IN 19TH-CENTURY AMERICAN LITERATURE/SEMINAR

An historical analysis of canonized and non-canonized American works from the second half of the 19th century. Historical contexts will be examined to explore the progression of interpretations directed at these works up to the present time. Mr. Elliott/Offered every year

283 VISIONS OF REPRESENTATION: 1860-1920/SEMINAR

Explores the problematic assumptions of literary representation underlying American real-

ism through selected works of American writers. Conventional interpretations of realist writing are often challenged by issues of race, class, gender, and cultural contexts. Examines works by Twain, Howells, James, Dreiser, Jewett, Cather, Cooke, Chopin, and others. Mr. Elliott/Offered every other year

286 AMERICAN MODERNISMS/DISCUSSION

Designed as an interdisciplinary approach to some American versions of modernism in the fine arts, c. 1910-c. 1940. Ideas about modernity, as it manifests itself in space, consciousness, gender and race in the U.S. are addressed, and close analyses of painting, architecture, poetry, and prose narrative are conducted in light of these ideas. The question of how well modernism serves such constituencies as African-American and women writers is discussed. Designed for upper-level students, preferably with some experience of interdisciplinary study, including English 180-181 or courses in American history, cultural geography, painting, or screen studies. Mr. Conron/Offered every year

289 POSTMODERN LANDSCAPE/SEMINAR

This seminar on postmodern and post-colonial American literature considers senses of place in recent American Indian, Latino (including Chicano, Cuban, and eventually Puerto Rican), Asian-American, and Afro-Caribbean writing. The course is designed to evoke the character of "life on the hyphen": that is, on the cultural borders between "American" and "Asian," "Latin," "Indian," "African."

Including, in any given semester, not more than three novels by writers of three of these ethnicities, it addresses intensively novels that seek to imagine and evoke (to "re-member") premodern and pre-colonial narratives, both historical and cosmological, as means of challenging the displacements created by the dominant narratives of Anglo-European culture. The novels chosen will be contextualized geographically, historically, and mythologically by supplementary readings. The course is designed to speak chiefly to the need for students to develop an imagination for, and a

grounding in, ethnic multiplicity. Permission required. Mr. Conron/Offered periodically.

290 CAPSTONE/SEMINAR

The capstone course aims to deepen and broaden each senior major's knowledge and interpretive skills. Time will be spent on those aspects of English or American literature which the Department feels every major should know. Throughout the semester, each student will work on a paper of his or her choosing (e.g., a research paper for another seminar, a part of the Honor's thesis). The literary text that will function as our touchstone throughout the semester is Dante's *Divine Comedy*. Seniors only, Ms. Gertz/Offered every year

291 HARLEM RENAISSANCE/SEMINAR

Introduces the development of African-American aesthetics and literature as they evolved from roughly 1920 to 1935. The defining historical forces of the 19th century as well as those of the early 20th century are explored as auxiliary concerns for the focused examination of the major and minor figures comprising this movement. This course will also examine the Harlem Renaissance women writers and their works which, until recently, have remained largely unknown. Mr. Napier/Offered periodically

292 HONORS IN ENGLISH: SENIOR YEAR

Invited and interested students should identify an area of interest with an advisor and apply in writing to the department chair with a brief description of the project *before the end of the junior year*. Honors in English normally carries two credits. With the advisor's approval, students should register as English 299.8 Honors in English for one credit in each of the two semesters of their senior year. The advisor and the student will agree on the project's stages. However, the department requires that a completed draft be turned in by the first day of the spring semester. The final thesis is due *three weeks* before the last day of the spring semester classes. The department requires one copy of

the final thesis. A second reader, chosen by the student and the advisor, participates in the final evaluation. Details are available in the handbook for English majors. Staff/Offered every year

293 STUDIES IN LANDSCAPE/SEMINAR

Concentrates on various aspects of 20th-century American space in literature, painting, photography, film and actual landscapes. Texts are chosen and taught by the students. Prerequisite: English 286, 287, or by permission. Mr. Conron/Offered every other year

294 HISTORY OF THE ENGLISH LANGUAGE/SEMINAR

Examines changes in English mainly during the Anglo-Saxon and medieval periods. In addition to learning phonological and grammatical characteristics of the language during each period, the student examines language as a mirror of culture. Ms. Gertz/Offered periodically

295 GENDER AND DISCOURSE/SEMINAR

Focuses on how cultural conceptions of gender guide language use for males and females and on ways in which discourse in its cultural context constructs gender. The implications for language use of ideology, enculturation and socialization patterns, dominance and inequality, and cultural diversity are considered. Both theory and research are covered, and students conduct their own research projects. Ms. Johnson/Offered every year

298 INTERNSHIPS

Offered for variable credit. Staff

299 DIRECTED STUDY

When asking a faculty member to sponsor directed study courses (299), the student should: 1) demonstrate competence to deal with the materials as literature and 2) present a well thought-out proposal. The student must take the initiative in selecting readings or carrying out the special project. Offered for variable credit. Staff

300 PEDAGOGY I

A one-on-one with a departmental faculty member on pedagogy. TAs only.

301 PEDAGOGY II

An advanced one-on-one with a department faculty member enabling the graduate student to acquire expertise in teaching. TAs only.
Prerequisite: ENG 300

315 LANGUAGE AND CULTURE IN THE U.S.

See English 215. Ms. Johnson/Offered every year

340 INTRODUCTION TO GRADUATE STUDY IN ENGLISH/SEMINAR

Examines certain fundamental aspects of literary theory and considers the nature of and relationships among the three principal areas in the discipline—bibliography and textual analysis, literary history, and literary criticism, emphasizing theory. M.A. candidates not specifically exempted are required to take this course. Seniors by permission of the instructor. Mr. Sultan/Offered every fall semester

341 20TH CENTURY CRITICAL METHODS

See English 240. Mr. Napier/Offered every year

342 GRADUATE SEMINAR: SPECIAL TOPICS

This seminar will be offered on a rotating basis by full-time faculty. The topic for Spring 2003 is Antebellum American Women Writers. Students will analyze the novels, narratives, and short stories of ten of the most prominent writers, including Lydia Maria Child, Catharine Sedgwick, Caroline Kirkland, Susan Warner, Harriet Beecher Stowe, Louisa May Alcott, Harriet Jacobs, Harriet Wilson, E.D.E.N. Southworth, and Rebecca Harding Davis. Issues to be addressed in class may encompass the relationship between gender and genre; the tensions and interplay between the domestic novel, local color fiction, and realism; and the role of race, class, and domestic ideology in shaping narrative form and content. Graduate students only. Ms. Roberts/Offered spring 2003

343 FEMINIST CRITICAL THEORY

See English 242. Mr. Napier/Offered every other year

344 INTERPRETATION OF DREAMS: MYTHICAL THOUGHT/SEMINAR

See English 244. Mr. Kaplan/Offered Fall 2002.

347 WORDSWORTH AND HIS CIRCLE

See English 247. Mr. Coovadia/Offered periodically

348 CONTEMPORARY LITERARY THEORY

See English 248. Mr. Elliott/Offered every year

349 SIGNS AND CROSSROADS: SEMIOTIC THEORY AND PRACTICE

See English 249. Ms. Gertz/Offered periodically

350 MEDIEVAL LITERATURE SEMINAR

See English 250. Ms. Gertz/Offered periodically

351 CHAUCER

See English 251. Ms. Gertz/Offered periodically

353 ADVANCED STUDIES IN SHAKESPEARE

See English 353. Ms. Vaughan/Offered every year

354 STILL SPACES - EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM

See English 254. Ms. Gertz/Offered periodically

355 STUDIES IN THE RENAISSANCE

See English 255. Ms. Vaughan/Offered every other year

356 SHAKESPEARE: PAGE TO STAGE

See English 256. Ms. Vaughan and Mr. Dilorio/Offered periodically

357 LANGUAGE AT ISSUE

See English 257. Ms. Johnson/Offered periodically

359 19TH CENTURY COMEDY

See English 259. Mr. Coovadia/Offered every other year

363 BRITISH ROMANTIC LITERATURE

See 263. Mr. Coovadia/Offered periodically

365 VICTORIAN LITERATURE

See 265. Mr. Coovadia/Offered periodically

371 VOICES FROM THE HOLOCAUST: TESTIMONY, LITERATURE, ART/SEMINAR

See English 271. Mr. Langer/Offered Fall 2002

372 JOYCE AND LAWRENCE

See English 272. Mr. Sultan/Offered every year

374 W. B. YEATS

See English 274. Mr. Sultan/Offered periodically

377 RACE AND GENDER IN AFRICAN-AMERICAN LITERARY THEORY

See English 377. Mr. Napier/Offered every year

378 MODERN POLITICAL LITERATURE

See English 278. Mr. Sultan/Offered periodically

380 EARLY AMERICAN POP CULTURE

See English 280. Mr. Roberts/Offered every other year

381 AMERICAN LITERARY RENAISSANCE

See English 281. Ms. Roberts/Offered every year

382 STUDIES IN 19TH CENTURY AMERICAN LITERATURE

See English 282. Mr. Elliott/Offered periodically

383 VISIONS OF REPRESENTATION: 1860-1920

See English 283. Mr. Elliott/Offered every other year

386 AMERICAN MODERISMS

See English 286. Mr. Conron/Offered every year

389 POSTMODERN LANDSCAPES

See English 289. Mr. Conron/Offered periodically

391 HARLEM RENAISSANCE

See English 291. Mr. Napier/Offered periodically

393 STUDIES IN LANDSCAPES

See English 293. Mr. Conron/Offered periodically

394 HISTORY OF THE ENGLISH LANGUAGE

See English 294. Ms. Gertz/Offered periodically

395 GENDER AND DISCOURSE

See English 295. Ms. Johnson/Offered every year

390 DEPARTMENTAL COLLOQUIUM

Provides graduate students with guidance, expertise, and resolution for the writing of the master's thesis. The chief requirement is an oral presentation, ordinarily given in the student's final semester of coursework. Participation and registration are required; however, the colloquium does not carry course credit and is not included as one of the eight

courses needed to fulfill M.A. requirements. Ms. Gertz/Offered every semester

397 MASTER'S THESIS

Prerequisite: permission of thesis advisor. Staff/Offered every semester

398 GRADUATE INTERNSHIPS

Staff/Offered for variable credit

399 GRADUATE DIRECTED STUDY

Staff/Offered for variable credit

ENVIRONMENTAL SCIENCE AND POLICY

Program Faculty

Halina S. Brown, Ph.D.: *toxicology, risk analysis and management, industry and environment, environmental policy, international issues*

Charles Agosta, Ph.D.: *experimental condensed matter physics, energy*

S. Leslie Blatt, Ph.D.: *physics, nuclear reactions, energy considerations*

Patrick Derr, Ph.D.: *philosophy, biomedical ethics, history and philosophy of science, ethical issues in risk analysis and management*

Timothy J. Downs, D.Env.: *natural resource management; water supply and sanitation; integrated capacity; risk analysis*

Jacque L. Emel, Ph.D.: *water resources, environmental politics, hydrology*

Robert L. Goble, Ph.D.: *physics, sustainable resource management, community participation in environmental decisions, risk analysis and management*

Jacqueline Geoghegan, Ph.D.: *resource economics, environmental policy, land use*

Susan Foster, Ph.D.: *ecology, evolutionary biology, population biology*

Dale Hattis, Ph.D.: *quantitative risk assessment, pharmacokinetic modeling, carcinogenesis, biomarkers, interindividual variability*

Todd P. Livdahl, Ph.D.: *ecology, population biology*

Donald Nelson, Ph.D.: *protein chemistry, environmental analysis*

Samuel J. Ratick, Ph.D.: *environmental engineering, energy and environmental systems, environment and public policy, modeling, quantitative methods*

Joseph Sarkis, Ph.D.: *operations management, environmentally conscious business practices*

Research Professor

Christoph Hohenemser, Ph.D.: *physics, technology assessment, hazard management, energy policy*

Program

Environmental Science & Policy is an interdisciplinary program that emphasizes policy questions about the environment and the use and misuse of science and technology. The goal of the program is to enable individuals to deal with technical and environmental issues in social and political arenas with an acute awareness of the short- and long-range limitations of the natural environment to respond to human interventions. The ES&P Program, as part of the Department of International Development, Community and Environment, offers an undergraduate major and a master of arts degree.

Participating ES&P faculty are drawn from a variety of departments and disciplines. They have research interests in a wide range of societal problems, including environmental science and management, energy and technology policy, and assessment and control of technological hazards. Undergraduates can gain practical skills in the world of research through opportunities to work collaboratively on research projects with faculty and graduate students.

Research topics focus on both the developed and developing world and include energy policy assessment, control of technological hazards, and environmental science and management.

Undergraduate Major

Required courses have been designed to provide students with a solid foundation in natural science and in-depth understanding of social science and public policy perspectives. A solid grasp of natural science is vital for two reasons: (1) many fundamental issues are fully understood only when the scientific elements are

made clear and (2) there is a great need in this field for managers of science, technology and environment who possess a comprehensive scientific background. Recognizing this, the Environmental Science and Policy major stresses natural science and mathematics. Emphasis in all courses is the effects of human activities on the natural environment and public health, and on the use of science in policy making.

Requirements for the Major

Degree requirements for the ES&P major include 18 courses:

- 10 courses of natural science and/or mathematics (in one of three tracks)
- 2 courses in the social sciences, with emphasis on public policy
- 6 Environmental Science and Policy courses, including the capstone.

ES&P majors may choose one of three tracks:

- I. Natural Science with a Disciplinary Focus
- II. Natural Science in Ecology or
- III. Mathematics and Computer Science.

I : Natural Science Track with a Disciplinary Focus

Requirements

- Six courses in one discipline of natural science, chosen from physics, chemistry, biology, or biochemistry.

[NOTE: Of the six courses in one discipline of natural science, at least two must be at 200-level to demonstrate literacy in the discipline. Students are required to consult with a faculty advisor from the natural science department selected to develop a coherent course of study in that discipline.]

- Two additional courses in a second natural science
- Two courses in mathematics: calculus and statistics
- Two courses in the social sciences, with emphasis on public policy
- Six Environmental Science & Policy courses, including the Capstone Seminar.

II: Natural Science Track in Ecology

Requirements

- Eight courses in biodiversity, physical geography and quantitative mapping.

NOTE: Of the eight courses in natural science, at least two must be at 200-level.

Chemistry 080, Perspectives in Environmental Chemistry, is required to be one of these eight courses. In individual cases, the faculty advisor may approve another chemistry course as a substitute for Chemistry 080.

Physical Geography and Quantitative Mapping Courses

Geog 014 Introduction to Physical Geography
Geog 115 Hydrology
Geog 113 Forest Hydrology
Geog 114 Intermediate Geomorphology
Geog 121 Introduction to Geology
Geog/EN 190 Introduction to GIS
Geog/EN 204 Watershed Ecology
Geog 205 Directed Research in Forested Ecosystems
Geog/EN 260 Quantitative Modeling

Biodiversity Courses

Biol 101-102 Introduction to Biology (parts 1 and 2)
Biol 105 Evolution
Biol 110 Introduction to Botanical Diversity
Biol 114 Marine Biology
Biol/EN 216 Ecology
Biol 220 Population Biology
Biol/EN 217 Ecology of Infectious Disease

- Two courses in mathematics: calculus and statistics
- Two courses in the social sciences, with emphasis on public policy
- Six Environmental Science & Policy courses, including the Capstone Seminar.

III: Mathematics and Computer Science Track

Requirements

- Four courses in natural science, chosen from biology, chemistry, physics, and physical

geography. One of the four courses should be the following:

Chem 080 Perspectives in Environmental Chemistry
Biol 104 Biodiversity or
Phys 144/ EN 240 Energy and the Environment

- Six course in computer science and/or mathematics, including calculus and statistics. Of the six courses, at least two must be at 200-level.

[NOTE: Students are required to consult with a faculty advisor from the Mathematics and Computer Science Department to develop a coherent course of study in that discipline.]

- Two courses in social sciences, with emphasis on public policy
- Six Environmental Science & Policy courses, including the Capstone Seminar.

Required for all three tracks:

Mathematics: two courses — calculus and statistics

The following courses satisfy the statistics requirement:

Econ 160 Introduction to Statistical Analysis
Gov 107 Research Methods
Geog 110/EN 247 Computer and Quantitative Methods
Psych 105 Quantitative Methods
Bio 280 Biostatistics

Social Sciences: Two courses should be chosen from the fields of economics, government, social geography, or sociology.

Examples of appropriate courses in social sciences.

Gov 154 The Politics of Public Policy in the US
Gov 157 Politics of Environmental Issues in the U.S.
Gov 213 Policy Analysis
Gov 281 Politics of Public Management
Econ 256 Environmental and Natural Resources Economics
Econ 157 The Economics of Natural Resources and the Environment
Soc 205 Sociology of Environment

Geog 127 Political Economy of Third World
Geog 142 Cities and Culture
Geog 171 Ecology and Economy of Tropics
Geog 224 Economy and Environment

- **ES&P Courses:** Students must take six courses with an EN designation. Three are required, and three are elective.

The three required ES&P courses are:

EN 101 Introductory Case Studies in ES&P

EN 175: Science, Decision-making, and Uncertainty

EN 290: Capstone Seminar, taken in the fall of the senior year.

Students may enhance the Capstone seminar by integrating it with internships (experience outside the University), research participation in one of the ES&P research groups, or individual research projects designed by the student. The Capstone experience may include the presentation of an honors thesis and a poster in the Clark University Academic Spree Day event, which is held each spring.

Students choose three additional EN elective courses from the following list.

[NOTE: At least two of these courses must be at a 200-level.]

EN 080 Perspectives in Environmental Chemistry

EN 123 Environmental Ethics

EN 142 Environmental Chemistry

EN 171 International Perspectives on Environmental Problems and Policies

EN 180 Earth Transformed by Human Action

EN 210 Environment and Society

EN 216 Ecology

EN 226 The Societal Analysis and Evaluation of Environmental Hazards

EN 240 Energy and the Environment

EN 241 Environmental Toxicology

EN 246 Cancer: Science and Society

EN 247 Computer and Quantitative Methods in Risk Analysis

EN 250 Technology and Environmental Assessment

EN 251 Limits of the Earth

EN 252 Corporate Environmental Management

EN 257 Environmental and Natural Resource Economics

EN 260 Quantitative Modeling

EN 265 Tools for Quantitative Policy Analysis

EN 276 Environmental Law

EN 280 Urban Ecology: Cities as Ecosystems

EN 282 Management of Environmental Pollutants

EN 284 Environment and Development

EN 286 Sustainability, Institutions and Policy Making

Declaring a Major

Clark requires all undergraduates to declare a major by the end of the second semester of the sophomore year. To do so, students obtain a declaration-of-major form at the Registrar's Office or in Academic Advising. The completed form should be signed by the undergraduate ES&P Advisor. A copy of the signed form should be given to the IDCE office, which will maintain an undergraduate folder for you.

Continued Academic Advising

After becoming ES&P majors, students should consult with their undergraduate ES&P advisor, who will provide information, help select a course of study, and discuss progress. The ES&P advisor replaces the academic advisor assigned when entering Clark. This faculty advising assures that students' questions are answered and confirms that degree requirements and educational goals are met. Students are encouraged to discuss any other important academic issues or concerns with their advisors.

Double Majors

The ES&P major meshes very well with a double major in science or mathematics, due to the emphasis placed on developing a solid scientific and/or mathematics background. Selecting this double major automatically fulfills the natural science/mathematics require-

ments of the ES&P program. This leaves a relatively small number of classes, mostly in the social sciences and ES&P categories, to be taken in addition to departmental requirements. Several of these will fulfill the University's requirements for the Program of Liberal Studies as "perspective" courses.

Double majoring with a social science department is more difficult because of the larger number of courses that must be taken to fulfill requirements with a lesser degree of overlap. Still, some students have put together successful joint programs between ES&P and departments such as economics and geography, the latter of which has separate requirements for dual or interdisciplinary majors. Double majors in humanities are feasible and have been successfully pursued, but they require careful planning.

Research Participation

Research participation provides a valuable learning opportunity as students interact with faculty members beyond the classroom. Most research projects require the equivalent of one or two semester-long courses, and often involve joining a research group comprised of one or more faculty and graduate students.

Honors

Honors in ES&P is awarded upon presentation and oral defense of an undergraduate capstone project and poster, which is presented at the Clark Academic Spree Day. To be considered, students must have attained at least a 3.0 grade-point average in courses related to the major by their junior year. It is advisable to begin work during the summer after the junior year on a project that can be extended into an honors thesis during the senior year. A faculty member will serve as mentor to the project, so it is essential for students to gain his or her agreement before beginning the project. The proposal must be submitted to the ES&P faculty and approved in the beginning of the fall semester of the senior year. There are three classifications of honors: honors, high honors, highest honors.

Internships

Internships broaden undergraduate education, and majoring students are encouraged to work outside the University in paid or unpaid positions related to their studies. An internship is most valuable after the junior year, when a student has developed intellectually and is ready to tackle interdisciplinary problem solving. This experience can be very helpful when it comes time to identify a research topic to be pursued in the senior year. A combination of work experience and research in their field proves invaluable when students enter the job market.

Internships are usually obtained on a case-by-case basis with the advice and assistance of the ES&P faculty advisor. Students who are interested in internships should discuss the matter with their undergraduate advisor and Academic Advising. If students wish to receive credit for an internship, it is essential that they provide a detailed written analysis of their work.

ES&P may be an ideal major for students planning to continue in professional schools, because ES&P requirements dovetail with those for many premedical and predentistry programs. The number of jobs available to graduating ES&P majors increases every year.

The Five-Year B.A./M.A. Program

The five-year B.A./M.A. program provides more intensive graduate study of ES&P in combination with a liberal arts B.A. degree. This degree is offered through the Department of International Development, Community, and Environment. Students in any undergraduate field are accepted for the M.A. degree, though ES&P undergraduate majors do have a significant advantage in preparation. Qualified ES&P majors can be admitted into the five-year program without any additional requirements. Majors in other disciplines, however, must supplement their studies with a number of preparatory ES&P courses. Students must apply for this program by the junior year to receive full tuition remission.

A request for admission to the combined B.A./M.A. program is made to the ES&P program graduate advisor during the junior year, and will be granted in the senior year on presentation of an acceptable program of undergraduate study. Full tuition remission requires a cumulative average of 3.25 or better. Students admitted to the B.A./M.A. Program take two graduate courses in their senior year. During the fifth year, their requirement for completion of the master's degree consists of eight additional credits.

The master's degree in ES&P is intended to train individuals to go directly from Clark into problem-solving jobs in the areas of health risk assessment, ecological risk assessment, technology assessment, environmental policy, resource management, computer modeling, and other selected fields.

For details on curriculum of the ES&P/M.A. and the admission requirements, please contact the IDCE office at 793-7201, and refer to the Guide to Accelerated Degree Programs.

The Graduate Curriculum

Please refer to the ES&P Graduate Program section found in the Department of International Development, Community, and Environment (IDCE) section of this catalog.

Courses

080 PERSPECTIVES IN ENVIRONMENTAL CHEMISTRY/LECTURE, DISCUSSION

See Chemistry 080. Mr. Nelson. Offered every year

101 INTRODUCTORY CASE STUDIES/LECTURE, DISCUSSION

Consists of detailed analysis of three cases that typify the concerns of the ES&P Program. These cover the various aspects of environmental and technical risks. Each case entails scientific and technical analysis as well as social and policy considerations. Formal lectures, readings, written assignments, and class discussion will be included. Ms. Brown/Offered every year

123 ENVIRONMENTAL ETHICS/LECTURE, DISCUSSION

Considers a number of ethical and public policy issues that arise from and within contemporary health care around two themes: the reemergence of tropical diseases as a serious public health threat, and the interest of governments and others in influencing individual reproductive decisions in light of national population policies. Readings are drawn from a variety of philosophical, sociological, epidemiological, biological, historical, and theological sources. In considering issues related to the reemergence of tropical diseases, particular emphasis will be given to the systematic question of mankind's interaction with the environment. Mr. Derr/Offered every year

142 ENVIRONMENTAL CHEMISTRY/LECTURE, LABORATORY

Focuses on the chemistry related to environmental problems, particularly aquatic chemistry and aquatic pollution. Equilibrium theory is developed as a model for aquatic chemistry, and chemical analyses of a local aquatic system are conducted in the laboratory according to Environmental Protection Agency procedures. Mr. Nelson/Offered every year

171 INTERNATIONAL PERSPECTIVES ON ENVIRONMENTAL PROBLEMS AND POLICIES/LECTURE, DISCUSSION

Highlights the scope of major global issues (e.g. climate change and biodiversity conservation), their social and political contexts, and what influences our population, development and environmental policy choices. Two central themes are used: 1) Conflicts of interest over assets, amenity, and distribution of costs and benefits, and 2) Sustainable development ideas, conflicts, and operational processes. The practicalities of solutions such as cultural change, business and trade practices, and regulations are explored. Mr. Downs/Offered every other year

175 SCIENCE, DECISION MAKING, AND UNCERTAINTY/LECTURE, WORKSHOP

Examines decision making under conditions of scientific uncertainty. The goal of the course is

to describe: (1) strengths and limitations of scientific analysis in the assessment of environmental and technological issues and (2) methods designed to aid decision making under uncertainty. Initial emphasis is on the structure of scientific knowledge, ways of knowing, and types of scientific uncertainty, with examples drawn from particle physics, chemistry, engineering, epidemiology, and opinion research. Case studies of environmental and technological risk management. Consider "real world" issues such as setting EPA standards, mad cow disease, and global warming. Weekly workshop includes practical exercises in statistical treatment of data, fitting data to a form, calculation of uncertainty, interpretation of epidemiological data, and computer simulations. A scientific perspective course. Mr. Goble/Offered every year

180 THE EARTH TRANSFORMED BY HUMAN ACTION/LECTURE, DISCUSSION

See Geography 180. Mr. Turner/Offered every year

190 INTRODUCTION TO GIS/LECTURE, LABORATORY

See ID 190. Mr. Marcano/Offered every semester

204 WATERSHED ECOLOGY/SEMINAR

Examines current scientific literature on the functional ecology and biogeochemistry of contrasting terrestrial ecosystems. Includes inputs, outputs, and internal transfers of water and nutrients in temperate hardwood forests, pine barrens, tropical rainforests, montane cloud forests, eucalypt woodlands, and arid environments. Emphasizes processes of rock weathering, leaching from above-ground vegetative surfaces, nutrient uptake by plants, atmospheric inputs, and stream discharge of nutrients. By permission only. Staff/Offered every year

210 ENVIRONMENT AND SOCIETY/LECTURE, DISCUSSION

Analyzes the relationship between human societies, especially those that are industrialized, and the natural environment. Among the topics to be considered are: the impact of industrialization on nature, the population-resource

debate, the rise of modern environmental concern and political action, and pesticides and energy policy issues. Staff/Offered every year

216 ECOLOGY/LECTURE

Provides an overview of ecology as a scientific discipline. The primary emphasis is on efforts to explain and predict the distribution and abundance of organisms, how ecological communities are composed, and why they vary in time and space. Prerequisites: one or more courses from the organismal biology group and one college-level math course. Mr. Livdahl/Offered every year

217 ECOLOGY OF INFECTIOUS DISEASE/LECTURE, DISCUSSION

Explores the relationship between infectious disease agents and their hosts, how that interaction can effect changes in the abundance of host populations. Factors that contribute to the occurrence and persistence of epidemics, the evolution of virulence and transmission, and strategies for controlling epidemics will be considered using theoretical approaches and case studies of diseases affecting humans and other hosts. A wide spectrum of human diseases will be considered, including human pathogens of recent concern (examples include HIV, Lyme Disease, West Nile Virus) and of historic and continuing importance (e.g., schistosomiasis, malaria, smallpox, yellow fever). Mr. Livdahl/Offered every other year

226 THE SOCIETAL ANALYSIS AND EVALUATION OF ENVIRONMENTAL HAZARDS: THEORY AND METHODS/SEMINAR

Theory and methods of hazard assessment and social response. Covers natural, technological, and global hazards and includes such topics as human vulnerability, disasters, public perceptions, social amplifications of risk, social learning, and corporate management of risk. Mr. Golding/Offered every year

240 ENERGY AND THE ENVIRONMENT

The production and utilization of energy play a central role in modern civilization, and constitute an increasing drain on our natural resources. Undesired byproducts of large-scale

energy usage are becoming more apparent, including local heating of streams and global warming, pollution of the atmosphere and ocean, and real and perceived dangers related to the use of advanced technology. The course explores these environmental concerns in the context of the possibilities and limitations set by physical laws, and considers the extent to which science must be involved in their resolution. Prerequisite: two semesters of introductory physics. Mr. Agosta/Offered every other year

241 ENVIRONMENTAL TOXICOLOGY/LECTURE, DISCUSSION

Focuses on the assessment of hazardous properties of toxic chemicals in the environment and on development of public health policy. Covers the principles of absorption, distribution, excretion, and toxic action of chemicals on humans; animal testing; and human epidemiology. Also covers assessment of public health risks on the basis of animal and human test results, development of standards for air and water contaminants, and uncertainty in regulating hazardous chemicals. Prerequisite: one semester of organic chemistry or permission of the instructor. Ms. Brown/Offered every other year

246 CANCER: SCIENCE AND SOCIETY/SEMINAR

Focuses on one of the most dreaded diseases in modern society: cancer. Examines the geographic distribution of cancer in this country and the world, factors contributing to its formation, and the biological mechanisms underlying cancer. Concentrates on screening techniques for detecting cancer-causing agents and on methods for assessing and regulating cancer risks and on case studies of selected human carcinogens as well as social and political controversies surrounding this disease. Ms. Brown/Offered every year

247 COMPUTER AND QUANTITATIVE METHODS IN RISK ANALYSIS/LECTURE, LABORATORY

Continues development, begun in Geography 110 of computer-based methods in geographical analysis. Focuses on bivariate and multi-

variate regression, discriminant analysis, factor analysis, log-linear models, and analysis of spatial and temporal data. Includes lab work with PCs, spreadsheets, and SPSS-X statistical software package. Prerequisite: Geography 110. Meets skill requirement for geography majors and graduate students. Mr. Ratick/Offered every year

250 TECHNOLOGY AND ENVIRONMENTAL ASSESSMENT/SEMINAR

See IDCE 352. Mr. Ratick/Offered every year

251 LIMITS OF THE EARTH

See IDCE 30251. Mr. Goble/Offered every year

252 CORPORATE ENVIRONMENTAL MANAGEMENT/LECTURE, DISCUSSION

See Management 252. Mr. Sarkis/Offered periodically

253 SUSTAINABLE FISHERIES MANAGEMENT/LECTURE, DISCUSSION

Most of the important New England commercial fishing areas are in serious trouble. Fisheries represent an interaction between human systems (fishing communities and their cultural, economic, institutional, and legal settings) and biological systems (the commercially desired fish species and the ecosystem which supports them). Simulation games with role-playing are an effective way of studying humans interacting in complex systems. We will study these interactions through a series of gaming exercises using (simplified) models of fisheries, and by reviewing and interpreting the historical and contemporary debate on the sustainability of fishing practices. Students will prepare papers and make presentations on ecological issues, on fishing communities and their practices, and on policy issues. Mr. Goble/Offered every other year

255 QUALITATIVE RESEARCH METHODS: SKILLS AND APPLICATIONS/LECTURE, DISCUSSION

See ID 255. Ms. Rocheleau/Offered every year

256 RESEARCH SEMINAR IN DYNAMIC ENVIRONMENTAL MODELING

Much environmental assessment, planning, and regulation is now based on dynamical

modeling (computer models that simulate pollution transport leading to human exposures and the potential consequences of such exposures over time or which simulate important aspects of ecological systems). The effective use of appropriate models and the critical interpretation of model results are key activities in environmental policy. In this seminar we will survey common applications of models, address key issues in the interpretation of model results, install, test and apply models that have been used in recent public policy evaluations, and perform some model construction. Basic computer literacy will be assumed and individually performed computer projects will be a substantial portion of the required work, but extensive computer science study is not a prerequisite. Mr. Goble/Offered every other year

257 ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS/LECTURE, DISCUSSION

See Economics 257. Ms. Geoghegan/Offered periodically

260 QUANTITATIVE MODELING/LECTURE, DISCUSSION

See ID 260. Mr. Pontius/Offered every year

265 TOOLS FOR QUANTITATIVE POLICY ANALYSIS/LECTURE, DISCUSSION

Discusses policy goals that have been advocated for risk management decision making on environmental and occupational chemical exposures—including equity in the distributions of risks and benefits, and appropriate priority-setting for the efficient use of public and private resources. Students apply quantitative analysis techniques to risk/policy problems through: relevant sets of categories for analysis, reflecting both value and causal mechanism considerations; mechanistic dynamic modeling of physical/biological processes, analysis of distributions—including but not limited to fitting distributions to data—in order to elucidate both variability and uncertainty; and basic use of spreadsheets. Mr. Hattis/Offered every year

271 GROUNDWATER HYDROLOGY AND MANAGEMENT/LECTURE, DISCUSSION

Introduces geological and hydrological factors controlling the occurrence and development of groundwater and the methods and impacts of groundwater management. Ms.Emel/Offered every other year

276 ENVIRONMENTAL LAW/LECTURE, DISCUSSION

A survey course in environmental law, with special emphasis placed on the practical skills necessary to understand and apply environmental laws and regulations. Topics include the history and development of modern environmental law, basic administrative law principles, water pollution control, wetlands protection, environmental impact review, solid and hazardous waste management, disposal, and site remediation, plus land use controls and “takings” issues. Covers the major federal environmental statutes, and draws upon Massachusetts law for examples of state and municipal initiatives. Staff/Offered every year

280 URBAN ECOLOGY: CITIES AS ECOSYSTEMS/LECTURE, DISCUSSION

Explores the ecology and physical geography of cities as systems built, inhabited, and “managed” by people. This class of ecosystem is often neglected except in studies of pollution, yet it is home to many of the world’s people and to a surprising number of plant and animal species as well. Readings, lectures, discussion, and written work combine landscape and systems ecology with physical and urban geography to broaden our understanding of city environments, both present and possible. Ms. Rocheleau/Offered periodically

282 MANAGEMENT OF ENVIRONMENTAL POLLUTANTS/SEMINAR

Studies approaches to regulating hazardous chemicals in air, water, and food. The course is built around the three general types of interventions that have been practiced by the regulatory agencies over the last three decades: shifting to safer technologies; issuing licenses to pollute in the form of industrial emission permits; and setting standards for air, water,

and food contaminants. The scientific controversies in setting standards and issuing permits are presented vis a vis the legislative mandates, the need for benefit-cost accounting, and the scientific uncertainty. The strengths and weaknesses of command-and-control system versus the incentive-based system with regard to industrial enterprises are also discussed.

Emphasizes recent efforts to decrease government involvement in corporate environmental management and to shift towards an incentive-based regulatory system. While focus is on public policies in the United States, international comparisons with Western European and Eastern European countries are included. The course has a seminar format, with weekly student presentations and class discussions.

Ms. Brown/Offered every year

284 ENVIRONMENT AND DEVELOPMENT IN THE MIDDLE EAST AND NORTH AFRICA/LECTURE, DISCUSSION

See Geography 284. Mr. Johnson/Offered every other year

286 SUSTAINABILITY, INSTITUTIONS AND POLICY MAKING/LECTURE, DISCUSSION

The globalization of commerce, increasing access to information, and growing threats to the earth's ecosystems require new ways of organizing the society and the market place in order to pursue environmental sustainability. Some call it "Natural Capitalism." This advanced seminar examines the roles of major types of institutions in implementing the agenda for sustainable development: the business sector, government, non-governmental organizations, and financial institutions. We discuss matching of policy instruments with policy objectives, including management of natural resources, technological innovation, pollution prevention, and system innovation. We examine partnerships among the key institutions as the possible vehicle for change. International considerations are included. The readings consist of both theoretical works and empirical case analyses. Ms. Brown/Offered every year

289 ADVANCED DEVELOPMENT THEORY/SEMINAR

A research seminar for students with backgrounds in development theory. The seminar examines recent tendencies in development, focussing on the rise of neoliberalism as a hegemonic discourse. We critically examine shifts in World Bank thinking from basic needs to export-orientation. Uses recent changes in post-Apartheid South Africa as a case study. Mr. Peet/Offered every year

290 CAPSTONE RESEARCH/SEMINAR

A required course for senior ES&P majors, this seminar offers an opportunity to integrate the strands of the ES&P major or to prepare a research proposal for a master's thesis. Specific topics for investigation are chosen largely on the basis of student interest from a broad array including global environment threats, energy and other resource issues, community brown-fields, and technological risk assessment and management. Unlike a regular course, student presentations constitute a major portion of class meetings, with the instructor as a facilitator of discussion and as a general resource for the group. Students must be seniors or second-semester juniors and must have completed a substantial fraction of their major requirements. Mr. Goble/Offered every year

294 HONORS THESIS

296 GIS AND LOCAL PLANNING/SEMINAR

See ID 296. Mr. Marciano/Offered every semester

298 INTERNSHIPS

Contact the IDCE office for internship proposal form. Staff/Offered every semester

299 INDEPENDENT STUDY

Staff/Offered every year

FOREIGN LANGUAGES AND LITERATURES

Department Faculty

- Carol C. D'Lugo, Ph.D.,** *chair: Spanish American narrative, translation*
- María Acosta Cruz, Ph.D.:** *19th- and 20th-century Spanish-American culture, comparative literature*
- Michiko Aoki, Ph.D.:** *Japanese language and culture*
- Paul F. Burke Jr., Ph.D.:** *Greek and Latin language and literature, classical mythology, classical art and archaeology*
- Marvin A. D'Lugo, Ph.D.:** *Hispanic literature and film, narrative theory*
- William Ferguson, Ph.D.:** *Spanish Golden Age literature, 20th-century Hispanic literature*
- Everett Fox, Ph.D.:** *Hebrew Bible, Midrash, Jewish ritual and folklore, classical Jewish thought*
- Beth W. Gale, Ph.D.:** *19th- and 20th-century French literature, women and the novel, cultural studies, the fairy tale*
- Kenneth Hughes, Ph.D.:** *19th- and 20th-century European literature, comparative literature, literary theory*
- Dorothy Kaufmann, Ph.D.:** *French literature, feminism and women writers, autobiography, French and Francophone cultural studies*
- Walter Schatzberg, Ph.D.:** *Age of Goethe, German expressionism in literature and the arts, German cinema, relations between literature and science*
- Michael K. Spingler, Ph.D.:** *French theater and film, comparative drama, translation*

Adjunct Faculty

- Marcia Butzel, Ph.D.:** *French and Italian film, cultural studies, French narrative*

Part-time Faculty

- Tzilla Barone, B.A.:** *Hebrew language and literature*
- Constance M. Montross, Ph.D.:** *Spanish language and literature*
- Catherine C. Quick Spingler, M.A.:** *French language and literature*
- Ivy Sun, M.A.:** *Latin*

- Alice Valentine, M.A.:** *Japanese language and literature*
- Man-Ying Wu, M.A.:** *Chinese*

Emeriti

- Raymond E. Barbera, Ph.D.:** *Romance languages*
- The Foreign Languages and Literatures Department is part of the Alice Coonley Higgins School of Humanities.

Undergraduate Program

The program investigates how peoples and nations express themselves through language, literature and other cultural phenomena. The interdisciplinary spirit of the program illuminates the relationship between national literatures and other areas of the humanities and social sciences.

The major is offered in French and Spanish. It is also possible, at the Department's discretion, to major in more than one language (the Combined Foreign Languages Major). A student-designed major in German is also available (see page 7).

There are majors available in Comparative Literature and Ancient Civilization as well. Though based in Foreign Languages and Literatures, these two programs—together with the minor offered by Ancient Civilization—are described elsewhere in the catalog under their own headings.

Major Requirements

1. Eight courses above the intermediate level.

In French, major credit is given for courses above French 106; in German, above German 102; in Spanish, above Spanish 127.

The eight required courses include:

 - a. An introductory-level course in literature;
 - b. A course in culture criticism;
 - c. For Spanish majors, an advanced grammar and composition course (Spanish 237 or the equivalent); for French majors, French 136 or 137;
 - d. The Advanced Topics course (299);

- e. At least two courses taken in a Clark-sponsored or Clark-approved study abroad program. (This requirement may be waived in special circumstances.)

At least four of the eight required courses must be taken in residence at the Worcester campus.

2. Five related courses, at least one of which must be Comparative 130, The National Imagination.

These five related courses are to be selected with the major advisor. They might be courses in other languages and literatures, or in subjects further afield that enrich the student's understanding of core material. When the major program is concentrated in one language, a reading knowledge of a second language is strongly recommended. Only course grades of C or better may be counted toward the major.

Requirements for the Combined Foreign Languages Major

- a. Five courses in each of two languages, chosen from the list of courses that would count toward a single-language major (German 103 and above; French 120 and above; Spanish 131 and above);
- b. The Advanced Topics course (capstone course, numbered 299.7) in at least one of the two language areas chosen;
- c. One course in Comparative Literature, normally the core course (CMLT 130) required of all our majors;
- d. Four related courses, as determined in consultation with the student's major advisor;
- e. At least two units of study abroad in a culture in which one of the target languages is spoken. Ordinarily, courses taken abroad may be counted toward the five required courses in each language area.

The Minor in Foreign Languages and Literatures

A minor program in Foreign Languages and Literatures is offered in French, German, and Spanish.

To qualify, a student must complete six courses in the chosen discipline at a level of difficulty that would count toward a major in that field. Some courses may be replaced by courses outside the field of study but related to it (a course in Latin American history, for example, might be counted as a related course toward a minor in Spanish). Advanced Topics courses required of majors (French 299, German 299, and Spanish 299) are not required for the minor, but they may be taken for minor credit with permission of the instructor. Courses taken in study abroad programs may be counted toward the minor, at the department's discretion. Students must declare their intention of fulfilling a minor by the end of the junior year. Only course grades of C or better may be counted toward the minor.

The Advisor System

Advisors are faculty in appropriate disciplines who are assigned to students when their major or minor is declared. Students and advisors should meet regularly. Advisors suggest a course of study, discuss and approve related courses, and, for majors, identify areas of special interest that could lead to an Honors project.

Honors in Foreign Languages and Literatures (Majors Only)

Majors who have done well in their Advanced Topics course (299) are invited to do an Honors project in the senior year. Students wishing to work for Honors should 1) determine a suitable topic, in consultation with the major advisor, 2) find a faculty supervisor in the appropriate area of study (it may or may not be the major advisor), and 3) secure the permission of the department chair. A second faculty reader will participate in the final evaluation of the Honors project.

Applicants for Honors should ordinarily ask the chair's permission before the end of the junior year. (Extensions of this deadline may be granted in special circumstances.) The Honors project supervisor and the student are expected to agree on a work schedule, but in any case a preliminary draft of the project must be com-

pleted by the first Monday in April. The final version is due one week before the last day of classes.

An Honors project counts as one unit of credit.

Study Abroad

Information on study abroad programs in France, Germany, and Spain is available at Clark's Office of Study Abroad Programs.

Advanced Courses

Advanced courses, listed by area of concentration:

Language Courses

- French 120 Ways of Writing, Ways of Speaking
- French 145 Translation Workshop
- German 131 Spoken and Written German
- Spanish 127 Practice in Oral and Written Spanish
- Spanish 141 Spanish Translation Workshop
- Spanish 237 Advanced Oral and Written Spanish

Studies in Literature

- French 131 Readings in French Literature
- French 210 Coming of Age in the French Novel
- French 275 Sartre, Beauvoir, Camus
- German 140 Modern German Prose
- German 156 The Modern German Short Story
- Spanish 131 Readings in Hispanic Literatures
- Spanish 236 Women in Hispanic Literature
- Spanish 238 Hispanic Literature of Political Commitment
- Spanish 239 Hispanic Caribbean Fiction
- Spanish 242 The Latin American Novel
- Spanish 245 Hispanic American Short Story
- Spanish 260 The Age of Cervantes

Studies in Culture

- French 136/137 Studies in French Culture
- French 240 Paris in Arts and Literature

- French 246 History, Writing, and Ideology: France since 1940
- French 249 The French-speaking World
- German 112 The Fairy Tales of the Brothers Grimm
- German 134 Germany and the European Union
- German 168 Music in German Literature and Thought
- German 188 The Culture of the Weimar Republic in Literature, Film, and the Arts
- German 197 The Faust Theme in Literature and Music
- Spanish 117 Field Work in the Hispanic Community
- Spanish 133 Studies in Hispanic Culture
- Spanish 243 Latin American Essay and Thought

Studies in Film and Theater

- Spanish 134 Latinos in Literature and the Visual Media
- French 160 French Culture Seen Through Film: Jean Renoir
- French 165 French Play Production
- French 263 History of French Cinema
- French 267 French Cinema: The New Wave
- French 270 The Modern French Theater: Experiments of the Avant-Garde
- German 150 The New German Cinema
- Spanish 140 Spanish Dramatic Expression: Play Production
- Spanish 246 Studies in Spanish Cinema
- Spanish 248 Studies in Latin American Cinema
- Spanish 249 Studies in Hispanic Cinemas

Courses

A. Chinese

CHINESE 101-102 ELEMENTARY CHINESE/ LECTURE, DISCUSSION

Introduces the Chinese language (standard Mandarin) for students with no background in Chinese. Focus is on all four language skills—speaking, listening, reading and writing—including the writing of Chinese characters.

No credit is given for Chinese 101 without successful completion of Chinese 102. Staff/ Offered every year

CHINESE 103-104 INTERMEDIATE

CHINESE/LECTURE, DISCUSSION

Covers the basic grammatical structures employed in modern vernacular Chinese and sufficient vocabulary and cultural background to engage comfortably in the most common types of social interaction in today's China and Taiwan. By the end of Chinese 104, students will possess the necessary tools to read essays and articles on current social issues, view programs and films in Mandarin, and discuss the content, in both written and oral form.

Prerequisite: Chinese 102 or permission.

(Completion of Chinese 103 is a prerequisite for participation in Clark's Study Abroad Program in Beijing.) Staff/Offered every year

B. Classics

CLASSICS 120 THE EPIC JOURNEY/FIRST-YEAR SEMINAR

Surveys examples of ancient epic literature, beginning with the Sumerian Epic of Gilgamesh and the Book of Exodus. Other texts studied include Homer's Iliad and Odyssey and Vergil's Aeneid, all in English translation. The unifying idea of the course will be the concept of the hero and of heroic action in the various cultures of the ancient world. Mr. Burke/Offered every other year

GREEK 101-102 INTRODUCTORY GREEK/LECTURE, DISCUSSION

Introduces the language of classical Greece. Covers the grammar and syntax of the Ancient Greek. Students read Ancient Greek texts including philosophical works such as Plato's "Apology of Socrates and Crito," and selections from Homer, Herodotus, and the New Testament. No credit is given for Greek 101 without successful completion of Greek 102. Mr. Burke/ Offered every other year

LATIN 101-102 INTRODUCTORY LATIN/LECTURE, DISCUSSION

Introduction to the language of Catullus, Vergil, Horace, et al., through reading, oral and written exercises in grammar and syntax.

Students will work in small groups and on a play performed on or around the Ides of March when they will also experience Roman cuisine. Ms. Sun/Offered every other year.

C. French

101-102 ELEMENTARY FRENCH/LECTURE, DISCUSSION

For students with no background in French or up to two years of high school French.

Students work on all four language skills—listening, speaking, reading, writing—to develop an active knowledge of French. Students participate in weekly conversation groups with a French teaching assistant and work individually in the language lab. No credit is given for French 101 without successful completion of French 102. Ms. Spingler/Offered every year

103 ELEMENTARY FRENCH: INTENSIVE/ LECTURE, DISCUSSION

Entry-level course for students with more than two years of high school French or the equivalent but who are not yet ready for intermediate-level work. Emphasizes active communication through speaking and writing. There are weekly discussion groups with a French teaching assistant and individual laboratory work. Ms. Spingler/Offered every semester

105 INTERMEDIATE FRENCH I/LECTURE, DISCUSSION

Consolidates basic skills for students who have completed French 102 or the equivalent.

Emphasizes communicative proficiency: the development of oral and written skills, self-expression, and cultural insight. There are weekly conversation groups with a French teaching assistant. Prerequisite: French 102, 103, or equivalent determined by placement exam. Staff/Offered every semester

106 INTERMEDIATE FRENCH II/LECTURE, DISCUSSION

Bridges basic skills courses and advanced courses in language, literature, and culture.

Emphasizes literary and cultural texts. Develops ability to articulate ideas and to participate in meaningful discussions in French. Grammar review is based on specific needs of the group

as revealed by class work and compositions. There are weekly conversation groups with a native French speaker. Prerequisite: French 105 or equivalent determined by placement exam. Staff/Offered every semester

112 FAIRY TALES OF THE WORLD/LECTURE, DISCUSSION

Fairy tales are among the oldest and simplest forms of literature. They communicate archetypal patterns of experience and behavior; they reflect wisdom of all ages derived from all cultures; their moral teaching is universal. This course will apply a variety of critical analysis methods to a selection of fairy tales from different countries, with an emphasis on the Brothers Grimm and Perrault. No prerequisites. Ms. Gale/Offered periodically

120 WAYS OF WRITING, WAYS OF SPEAKING/LECTURE, DISCUSSION

This third-year level course increases communicative competence in writing and speaking French. Models taken from French and Franco-phone texts are used as a basis for critical expression. Develops awareness of different registers of French and strengthens both grammatical control and range of language use. Prerequisite: French 106 or equivalent determined by placement exam. Staff/Offered every semester

130 THE NATIONAL IMAGINATION

See Comparative Literature 130. Staff/Offered every year

131 READINGS IN FRENCH LITERATURE/LECTURE, DISCUSSION

Introduces analysis and understanding of French literary texts and their visions of the world and of the self. Focuses on literary structures and conventions that form the basis of different genres through history. Readings include a wide range of complete texts in fiction, theater, and poetry. Prerequisite: French 120 or permission. Staff/Offered every year

136 STUDIES IN THE EVOLUTION OF FRENCH CULTURE/LECTURE, DISCUSSION

Traditional French values, myths, and social institutions in their relationship to changing cultural and social realities. We study Louis

XIV's Gardens of Versailles and Napoleon III's redesigning of Paris as cultural texts that represent dominant political and social ideologies. Prerequisite: French 120 or permission. Mr. Spingler/Offered every other year

137 STUDIES IN CONTEMPORARY FRENCH CULTURE/LECTURE, DISCUSSION

Questions of cultural identity and cultural differences, with particular attention to France and foreigners, Franco-American (dis)connections, and issues of immigration. Prerequisite: French 120 or permission. Ms. Kaufmann/Offered every other year

145 TRANSLATION WORKSHOP/LECTURE, DISCUSSION

Students work on various texts (advertising, journalism, theater, film scripts, and fiction) exploring theory, techniques, and problems of translation. Emphasizes translation from French into English and stresses lexical and syntactic aspects of comparative style. Students become acquainted with the variety of texts an American professional translator might expect to work on, including film subtitling. Prerequisite: French 120 or above or permission. Mr. Spingler/Offered periodically

160 FRENCH CULTURE SEEN THROUGH FILM: JEAN RENOIR/LECTURE, DISCUSSION

Analyzes cinematic aesthetic and narrative strategies of the films of Jean Renoir, a leading figure in French cinema. Traces development of his art and focuses particularly on the way two works, "The Grand Illusion" and "The Rules of the Game," explore the historical problem of a continuing presence of pre-revolution values and myths within 20th-century French "republican" culture. Taught in English and French sections. Prerequisite for students receiving French credit: one course above 130 or permission. Mr. Spingler/Offered periodically

165 FRENCH PLAY PRODUCTION/LECTURE, DISCUSSION

A workshop course using scene study to provide direct experience of the theatrical synthesis within which play, actor, and spectator operate. Emphasizes vocal delivery through intensive work on diction, phrasing, rhythm,

and gesture. Explores various approaches to the play's staging. Typically one playwright is studied and topics of theatrical practice are combined with theoretical issues concerning the social background and artistic conventions of the playwright's period. Playwrights studied may be: Molière, Marivaux, Ionesco, Beckett. Conducted in French. Prerequisite: one French course above 130 or permission. Mr. Spingler/Offered every other year

170 THE COMIC TRADITION/LECTURE, DISCUSSION

Traces the tradition of self-referential theater in France and explores the techniques of the play-within-the-play. The course also examines how playwrights parody and subvert the dominant theatrical conventions and styles of their time, ranging from 17th century comedy through contemporary absurdist and avant-garde theater. Playwrights studied include Molière, Marivaux, Musset, Feydeau, Anouilh, Ionesco, Genet and Beckett. Mr. Springler/Offered periodically

210 COMING OF AGE IN THE FRENCH NOVEL/LECTURE, DISCUSSION

A close look at youth and the construction of adult identity in the French novel of the 19th and 20th centuries. Discussion of instruction vs. education, family structures, friendship, love relationships and sexuality, gender roles and society, and the transformation of narrative forms. Authors may include Balzac, Sand, Zola, Rachilde, Colette, Gide, and Duras. Taught in French. Prerequisite: 131, 136 or above or permission. Staff/Offered periodically

215 20TH-CENTURY FRENCH AND FRANCOPHONE WOMEN WRITERS/LECTURE, DISCUSSION

See Comparative Literature 215. Taught in English. Ms. Kaufmann/Offered periodically

225 LITERATURE AND FILM OF GERMAN-OCCUPIED FRANCE/SEMINAR, DISCUSSION

Explores questions of resistance, accommodation, and collaboration in the context of the traumatic defeat of France in 1940 and its occupation by Nazi Germany through readings, including texts by Jean-Paul Sartre and Albert Camus, and films, including "Au revoir les

enfants," "A Woman's Story," and "Weapons of the Spirit." Taught in English. Ms. Kaufmann/Offered periodically

240 PARIS IN ARTS AND LITERATURE/SEMINAR

Investigates changing urban consciousness of 19th-century France by examining problems of representing the city through urban planning (architecture and urban landscape), and through visual representation of Paris by two painters, Caillebotte and Manet, and the literary representation of Paris by two poets, Baudelaire and Rimbaud. Given in French. Prerequisite: two French courses above 130 or permission. Mr. Spingler/Offered periodically

241 MYSTERIES OF THE CITY/LECTURE, DISCUSSION

Study 19th century France origins of the myth of the city as a place of mystery, enchantment and danger. Starting with Eugène Sue's *Mysteries of Paris*, the course traces narrative and poetic representations of the city as instances of the melodramatic imagination. Explore the roots of the modern roman and film noir in such texts as Zola's *Thérèse Raquin*. Authors studied include Eugene Sue, Victor Hugo, Honoré de Balzac, Charles Baudelaire and Emile Zola and some 20th century cinematic representations of 19th century Paris. Conducted in French. Mr. Springler/Offered periodically.

246 HISTORY, WRITING AND IDEOLOGY: FRANCE 1940/LECTURE, DISCUSSION

An interdisciplinary analysis of contemporary France, using literature, social texts, and film. Focuses on the Occupation, the French war in Algeria, new cultural and artistic ideologies. Sometimes given as a research seminar (French 299). Prerequisite: Two courses above 130 or permission. Ms. Kaufmann/Offered periodically

249 THE FRENCH-SPEAKING WORLD/ LECTURE, DISCUSSION

An interdisciplinary analysis of questions of cultural identity as they have been elaborated by Francophone writers during the colonial and particularly the post-colonial period, with special emphasis on French-speaking Africa, the Antilles, and the Maghreb. Through liter-

ature, social texts and film we explore such issues as tradition and modernity, conflicts between (and within) indigenous and French social codes; the Algerian war and its legacy; women and Islam. Prerequisite: two French courses above 130 or permission. Ms. Kaufmann/Offered periodically

263 HISTORY OF FRENCH CINEMA/ LECTURE, DISCUSSION

See Screen Studies 263. Ms. Butzel/Offered periodically

267 FRENCH CINEMA: THE NEW WAVE/ LECTURE, DISCUSSION

Focuses primarily on the films of Jean-Luc Godard, which profoundly changed the "look" of contemporary cinema including American films. Also includes films by François Truffaut, Louis Malle, and Claude Chabrol, but primarily explores how Godard's radical transformations of film form reflected the crisis in cultural and political consciousness in France in the 1960s. Taught in English. Prerequisite for French credit: two courses above 130 or permission. Mr. Spingler/Offered periodically

270 THE MODERN FRENCH THEATER: EXPERIMENTS OF THE AVANT-GARDE/LECTURE, DISCUSSION

Studies the origins and developments of the avant-garde theater of France with particular emphasis on the staging of the plays. Focuses on the theater since 1950, especially works by Ionesco, Beckett, Genet, and Arrabal. Explores affinities between these playwrights and Dada and Surrealist movements and studies three precursors: Jarry, Ghelderode, and Artaud. Conducted in French. Prerequisite: two courses above 130 or permission. Mr. Spingler/Offered periodically

275 SARTRE, BEAUVOIR, CAMUS/LECTURE, DISCUSSION

A study of representative literary works of each writer in the context of his or her philosophical and political theories. We explore such questions as freedom and existential choice, the absurd, ideologies of revolt, and the aesthetics and ethics of *littérature engagée*. Ms. Kaufmann/Offered periodically

299 ADVANCED TOPICS/SEMINAR

A required capstone course for senior majors. Open to advanced students with permission of instructor. Modified versions of courses above the 200 level are offered periodically for 299 credit. Ms. Gale, Ms. Kaufmann, Mr. Spingler/Offered every year

COURSES OFFERED AT L'UNIVERSITE DE BOURGOGNE, DIJON, FRANCE

Students who participate in Clark's study abroad program at the Université de Bourgogne may take up to 8 course units in French and other fields. Courses are offered both in the Faculté des Lettres and the Faculté de Droit and at the Centre International d'Etudes Françaises (CIEF). The following is a representative list of courses that have been offered in the past:

Faculté de Lettres et Faculté de Droit

Thème et Version – Translation Workshop

French-English and English-French

Littérature française – Romantisme et Modernité

Littérature française – L'Univers balzacien

Littérature française – Le Roman au XVIIe et XVIIIe siècles

Littérature comparée – Paris entre les deux guerres

Littérature comparée – Images de la femme dans la littérature française

Histoire de L'Art médiéval

Histoire de la Bourgogne médiévale

Histoire économique et sociale

Initiation à l'histoire rurale

Institutions politiques comparées

Analyse de la vie politique

Politiques européennes

Centre Internationale d'Etudes françaises

Composition et expression écrite –

Advanced written French

Grammaire

Stylistique

La littérature et ses genres

Civilisation: La France contemporaine

Histoire de l'art: La peinture française au milieu du XIXe siècle

Culture et musique

Cinéma
Théâtre contemporain
Les philosophies de l'existence en France
Histoire de la Troisième République
Français économique et commerciale

D. German

101-102 INTRODUCTORY GERMAN/ LECTURE, DISCUSSION

Imparts an active command of German.
Combines grammar, oral practice, and readings in literary and expository prose. There are weekly conversation groups with a native German speaker and individual laboratory work. No credit is given for German 101 with-
out successful completion of German 102.
Staff/Offered every year

103 INTERMEDIATE GERMAN I/LECTURE, DISCUSSION

Consolidates basic skills for students who have completed German 102 or the equivalent.
Reviews grammar, reading, and discussion of selections from newspapers and magazines.
Develops skills in oral and written expression.
There are weekly conversation groups with a native German speaker and individual laboratory work. Prerequisite: German 102 or equivalent. Mr. Hughes/Offered every year

104 INTERMEDIATE GERMAN II/ LECTURE, DISCUSSION

Bridges basic skills courses and advanced courses in language, literature, and culture. Reviews grammar and studies literary works on themes of contemporary German culture. Develops the ability to articulate ideas and to participate in discussions in German. There are weekly conversation groups with a native German speaker as well as individual laboratory work.
Prerequisite: German 103 or equivalent.
Mr. Hughes/Offered every year

130 THE NATIONAL IMAGINATION

See Comparative Literature 130. Staff/Offered every year

131 SPOKEN AND WRITTEN GERMAN/LECTURE, DISCUSSION

This third-year course strengthens speech habits, increases vocabulary, and improves

written expression. Literary and journalistic texts serve as a basis for discussion of contemporary issues. Weekly written assignments.
Prerequisite: German 104 or equivalent.
Staff/Offered every year

134 GERMANY AND THE EUROPEAN UNION/LECTURE, DISCUSSION

Explores issues surrounding the reunification of Germany and its association with other European states. Students select and analyze (in German) articles and other documents on social, cultural, political and economic topics from sources in government, the independent media, etc. Prerequisite: German 131 or equivalent; basic Internet familiarity. Mr. Hughes/
Offered periodically

140 MODERN GERMAN PROSE/LECTURE, DISCUSSION

Studies prose by Kafka, Hesse, Mann, Böll, Borchert and Walser; includes discussions, oral and short written reports in German.
Prerequisite: German 131 or equivalent.
Mr. Hughes/Offered periodically

156 THE MODERN GERMAN SHORT STORY/LECTURE, DISCUSSION

After years of isolation and stagnation during and after the Nazi period, young writers, anxious to establish new values and connect with international literary developments, discovered the English and American short story and adapted it to historical, social, and cultural conditions in Germany. The short story became the most important literary form. This course reviews leading modern German writers, emphasizing thematic variety and structural complexities. Prerequisite: German 131 or equivalent. Mr. Hughes/Offered periodically

206 SPECIAL TOPICS IN GERMAN

Offered for variable credit. Staff/Offered every semester

GERMAN LITERATURE COURSES CONDUCTED IN ENGLISH

188 THE CULTURE OF THE WEIMAR REPUBLIC IN LITERATURE, FILM, AND THE ARTS/LECTURE, DISCUSSION

Explores modernism and modernity in German literature and art during the Weimar Republic

(1918-1933). Studies novels, plays, films, and paintings within the framework of cultural and political developments in Germany from the turn of the century to the rise of National Socialism. Mr. Schatzberg/ Offered every other year

299, SEC.7 ADVANCED TOPICS TUTORIAL IN GERMAN LITERATURE/LECTURE, DISCUSSION

Determined by the needs and interests of individual students. Ordinarily taken by senior German majors as a capstone experience. Other advanced students of German language and literature may be invited to participate in the tutorials as space permits. Staff/Offered every year

E. Hebrew

HEBREW 101-102 ELEMENTARY HEBREW/LECTURE, DISCUSSION

Modern conversational Hebrew. Emphasizes speaking, reading, writing, and listening skills. Acquisition of vocabulary and basic grammar. Two class meetings per week, one hour of mandatory drill sessions led by a teaching assistant, and individual work in the language laboratory. No credit is given for Hebrew 101 until successful completion of Hebrew 102. Ms. Barone/Offered every year

HEBREW 103 INTERMEDIATE HEBREW/LECTURE, DISCUSSION

Modern conversational Hebrew. Emphasis on speaking, reading, writing, and listening skills. Enrichment and reinforcement of verbal expressions and grammatical structures. Two class meetings per week, one hour of mandatory drill sessions led by a teaching assistant, and individual work in the language laboratory. Hebrew 102 or the equivalent required. Ms. Barone/Offered every year

HEBREW 104 INTERMEDIATE/ADVANCED HEBREW/LECTURE, DISCUSSION

Surveys significant Hebrew texts, including literature and newspapers, focusing on the Holocaust through literature. Enrichment of verbal and written expression and grammatical structures. Two class meetings per week, one

hour of drill sessions, and individual work in the language laboratory. Hebrew 103 or equivalent required. Ms. Barone/Offered every year.

HEBREW 105 ADVANCED HEBREW/LECTURE, DISCUSSION

For students who have studied the basics of Hebrew grammar. Reinforces conversational and grammatical skills through discussion, composition, and reading Hebrew literature and newspapers. Literary readings focusing on Israel or the development of the language. Prerequisite: Hebrew 104 or the equivalent. Ms. Barone/Offered every year

HEBREW 299, SEC. 6 SPECIAL TOPICS IN HEBREW/DISCUSSION

Presents modern Hebrew literature, predominantly in the original language. Through poetry, short fiction, and current journalism, the course examines major issues in Israeli culture: the early immigrant experience, the Holocaust, and the Arab-Israeli conflict. Students enrich their verbal and written expression and study increasingly complex grammatical structures. Ms. Barone/Offered every year

F. Japanese

JAPANESE 101-102 ELEMENTARY JAPANESE/LECTURE, DISCUSSION

Introduces the Japanese language, emphasizing speaking, listening, reading, and writing skills. No credit is given for Japanese 101 without successful completion of Japanese 102. Ms. Valentine/Offered every year

JAPANESE 103-104 INTERMEDIATE JAPANESE/LECTURE, DISCUSSION

A continuation of first-year Japanese, emphasizing learning kanji, mastering more complex grammatical forms, and increasing fluency. Prerequisite: Japanese 102 or permission. Staff/Offered every year

JAPANESE 105-106 ADVANCED JAPANESE/LECTURE, DISCUSSION

Primary emphasis is on building critical vocabulary and understanding Japanese behavior patterns. Prerequisite: permission. Staff/Offered periodically

JAPANESE 180 JAPANESE CULTURE AND LITERATURE IN TRANSLATION/LECTURE, DISCUSSION

The course is designed to offer students a foundation for understanding Japanese culture and its values, which are critically different from those of the West. It explores in historical context the ways in which Japanese society has been formed and investigates how it has sustained its values in the modern world. Taught in English. Ms. Valentine/Offered periodically

G. Russian

RUSSIAN LITERATURE IN ENGLISH TRANSLATION

RUSSIAN 220 THE RUSSIAN NOVEL IN THE 19TH CENTURY/LECTURE, DISCUSSION

Examines representative great Russian works of the last century in English translation, which are considered both as works of literary art and as social and historical artifacts. Readings include Tolstoy's "Anna Karenina," Turgenev's "Fathers and Children," and representative works of Pushkin, Gogol, Dostoevsky, and Chekhov. Mr. Hughes/Offered every other year

H. Spanish

The Spanish program is based on a three-year rotation. Advanced courses listed as offered periodically are generally available at least once every three years.

101-102 ELEMENTARY SPANISH/DISCUSSION

For students with two years or less of the language, this course develops basic skills in speaking, reading, and writing Spanish. Meets for three hours per week; regular class assignments are supplemented by individual work in the Language Arts Resource Center (LARC). No credit is given for Spanish 101 without successful completion of Spanish 102. Ms. Acosta Cruz, Ms. Montross, Staff/Offered every year

103 ELEMENTARY SPANISH: INTENSIVE/ LECTURE, DISCUSSION

An accelerated elementary course, intended for students who have had more than two years of high-school Spanish but who do not yet qualify for intermediate-level courses. Three

hours per week, plus individual work in the Language Arts Resource Center. Placement by the Department required. Staff/Offered every year

105 INTERMEDIATE SPANISH I/LECTURE, DISCUSSION

Integrates the essential aspects of Spanish in a structured manner, while at the same time reviewing grammar and enhancing skills in reading, writing, and conversation. Also develops awareness and appreciation of Hispanic cultures. Prerequisite: successful completion of 101-102, 103 or placement by the Department. Discussion session required. Ms. Acosta Cruz, Ms. D'Lugo, Staff/Offered every semester.

106 INTERMEDIATE SPANISH II/LECTURE, DISCUSSION

Normally taken after 105, Spanish 106 further strengthens skills in the language through grammar reviews, readings on Hispanic themes and class discussions. Emphasis is on activities in reading, writing, speaking, and conversational understanding as a preparation for more advanced work. Prerequisite: successful completion of 105 or placement by the Department. Discussion session required. Ms. Acosta Cruz, Ms. Montross, Staff/Offered every semester.

117 FIELD WORK IN THE LATINO COMMUNITY

Offers an opportunity to work in an agency or project serving the Latino community in Worcester (the bilingual school program, Casa de la Comunidad, Worcester Legal Services, etc.). Advisors supervise the student work. Students keep a journal on the experience, in which they examine language, culture and related problems of the bilingual community. Students read works of Latino literature and write short papers in Spanish. Weekly meetings with instructor. Prerequisites: proficiency in Spanish; successful completion of course work in the field or fields related to the specific project area; permission of instructor. Offered for credit, but is not graded. Ms. Montross/Offered every semester.

127 PRACTICE IN ORAL AND WRITTEN SPANISH/LECTURE, DISCUSSION

A transitional course between intermediate Spanish and the upper-level offerings. Develops fluency and sophistication in spoken and written Spanish. Emphasizes practice in conversation, composition, and selected grammar review. Prerequisite: Spanish 106 or by permission. Ms. D'Lugo, Mr. Ferguson, Staff/Offered every semester

130 THE NATIONAL IMAGINATION

See Comparative Literature 130. Staff/Offered every year

131 READINGS IN HISPANIC LITERATURES/LECTURE, DISCUSSION

Introduces modern Hispanic narrative, lyric, and dramatic literature. Studies works by authors of Spain and Latin America and their literary, social, cultural, and political context. Readings illuminate such themes as the idea of cultural continuity and modernity, notions of norm and deviance in the Hispanic community, and national identity. Since course content is variable, students may request permission to take the class twice. Conducted in Spanish. Prerequisite: Spanish 127, or by permission. Required for majors. Ms. D'Lugo, Mr. D'Lugo, Mr. Ferguson, Ms. Acosta Cruz/Offered every semester

133 STUDIES IN HISPANIC CULTURE/LECTURE, DISCUSSION

A third-year course introducing students to the diversity of Hispanic culture through literature, history, the arts, Internet, and visual media. Focuses on one or two of the following national cultures: Chile, Cuba, Mexico, Puerto Rico, Spain, Argentina. Conducted in Spanish. Prerequisite: Spanish 127, or permission. Required for majors. Ms. Acosta Cruz, Ms. D'Lugo, Mr. Ferguson, Mr. D'Lugo/Offered periodically

134 LATINO LITERATURE AND MEDIA

Explores the variety of expressions of Latino identity as a hybrid formation within U. S. culture of the last half-century. Unlike traditional Spanish-language literature, which is histori-

cally formed and rooted within a Hispanic national community, Latino culture generally functions between and around cultures. It is a culture of migration, assimilation, resistance to the melting pot, as well as a unique expression of a new ethnicity in formation. It expresses, among others, the identity of Puerto Rican-Americans, Cuban-Americans, and Mexican-Americans and that of other Spanish speakers living in the U. S. The objective of the course is to explore the variety of efforts to define Latino culture in the U. S. through literary and cinematic practices as well as through political and cultural writings. Conducted in Spanish. Some readings in English. Prerequisite: Spanish 131 or permission of the instructor. Mr. M. D'Lugo/Offered periodically

140 SPANISH DRAMATIC EXPRESSION: PLAY PRODUCTION/LECTURE, DISCUSSION

Acquaints students with the rhythms, intonations, and gestures typical of contemporary spoken Spanish. Through study and presentation of two or more contemporary dramatic works, students gain practical experience in linguistic and cultural skills. Although some consideration is given to the texts as literature, the course is primarily a workshop in advanced oral Spanish. Prerequisite: Spanish 127. Staff/Offered periodically

141 SPANISH TRANSLATION WORKSHOP/LECTURE, DISCUSSION

Introduces students to the basic issues involved in translation including considerations of cultural difference, language equivalencies, translation loss, and ways to approach the source text. Among the texts translated are fragments of prose fiction, songs, magazine ads, product instructions, editorials, and movie dialogue [sub-titling]. Prerequisite: Spanish 131 or permission. Ms. D'Lugo/Offered periodically

236 WOMEN IN HISPANIC LITERATURE/LECTURE, DISCUSSION

Studies women and culture in Hispanic literature, emphasizing the 20th century. Topics include alienation, identity, family structure, violence against women, and women in the

national imagination. Readings are from the Spanish and Latin American tradition. Conducted in Spanish. By permission only. Ms. D'Lugo/Staff/Offered periodically

237 ADVANCED ORAL AND WRITTEN SPANISH/LECTURE, DISCUSSION

An advanced language course offering a sophisticated review of grammar with exercises in composition, vocabulary, pronunciation, and intonation. Conducted in Spanish. By permission only. Required for majors. Ms. Acosta Cruz/Offered periodically

238 HISPANIC LITERATURE OF POLITICAL COMMITMENT/LECTURE, DISCUSSION

Studies the creative writer's position amidst 20th-century revolutionary change. Writers discussed include Pablo Neruda, César Vallejo, Ernesto Cardenal, Francisco Ayala, and Miguel Hernández; Cuban writers and poets in their sometimes ambiguous relationship to their country's revolution; the writers of the Chicano movement and the dream of Aztlán; and Puerto Rican authors, both on the mainland and on their native island. Conducted in Spanish. Prerequisite: Spanish 131 or permission. Mr. Ferguson/Offered periodically

239 HISPANIC CARIBBEAN FICTION/ LECTURE, DISCUSSION

Examines 19th- and 20th-century literature, arts, and media in Spanish language in the Caribbean Basin. Topics include: Afro-Antillean culture movements, women's literature, and national identity. Conducted in Spanish. By permission only. Ms. Acosta Cruz/Offered periodically

241 MODERN SPANISH NARRATIVE/LECTURE, DISCUSSION

A survey of the principal developments in Spanish narrative from the early rise of realism in the mid-19th century through the revival of the novel in the aftermath of the Spanish Civil War. Particular emphasis on development of innovative narrative forms and the cultural thematics of modernization. Conducted in Spanish. Prerequisite: Spanish 131 or permission. Mr. D'Lugo/Offered periodically

241 MYSTERIES OF THE CITY/LECTURE,

DISCUSSION

Study 19th century France origins of the myth of the city as a place of mystery, enchantment and danger. Starting with Eugène Sue's *Mysteries of Paris*, the course traces narrative and poetic representations of the city as instances of the melodramatic imagination. Explore the roots of the modern roman and film noir in such texts as Zola's *Thérèse Raquin*. Authors studied include Eugene Sue, Victor Hugo, Honoré de Balzac, Charles Baudelaire and Emile Zola and some 20th century cinematic representations of 19th century Paris. Conducted in French. Mr. Springler/Offered periodically.

242 THE LATIN AMERICAN NOVEL/ LECTURE, DISCUSSION

Readings and discussions of selected works by contemporary Latin American novelists, emphasizing technical innovations in relation to social and political thematics. Critical, historical, and cultural material provides a context for the creative surge reflected in 20th-century narrative practice. Authors include García Márquez, Cortázar, Puig, Fuentes, Bombal, and Mastretta. Prerequisite: Spanish 131 or permission. Ms. D'Lugo/Offered periodically

243 LATIN AMERICAN ESSAY AND THOUGHT/LECTURE, DISCUSSION

History and development of Latin American culture of 19th and 20th centuries through the essay genre. Looks at essays that explore issues of national identity, politics, minority women's status, and humor. Conducted in Spanish. By permission only. Ms. Acosta Cruz/Offered periodically

245 HISPANIC AMERICAN SHORT STORY/LECTURE, DISCUSSION

Introduces the tradition and development of short narrative in Hispanic America, from its beginnings in colonial chroniclers through the progressive refinements of theme, local color, style, and narrative technique that led to fictions of the 20th-century "boom" and beyond. Readings include works by Rubén Darío, Horacio Quiroga, José Luis Borges, Carlos

Fuentes, Julio Cortázar, Juan Rulfo, Rosario Ferré, Luisa Valenzuela. Conducted in Spanish. Prerequisite: Spanish 131 or permission. Mr. Ferguson, Ms. D'Lugo/Offered periodically

246 STUDIES IN SPANISH CINEMA/ LECTURE, DISCUSSION

Surveys principal Spanish films and filmmakers of the past 50 years in the context of political and social change in Spain. Considers formulation of cultural ideology through franquista cinema in the 1940s and rise of opposition cinema 1950-1975, operations of film censorship, rise of regional film cultures in post-Franco Spain, and auteurism and national/international audiences of Spanish cinema. Topics vary each time the course is offered. Conducted in Spanish. Offered in English on an occasional basis. Mr. D'Lugo/Offered periodically

248 STUDIES IN LATIN AMERICAN CINEMA/LECTURE, DISCUSSION

Surveys film cultures, directors, and works in Latin America, emphasizing developments in Argentina, Brazil, Cuba, and Mexico. Examines politics of representation, cultural nationalism in Latin American cinema, issues of authorship, and alternative film practices in Third World cinema. Conducted in Spanish. Offered in English on an occasional basis. Mr. D'Lugo/ Offered periodically

249 STUDIES IN HISPANIC CINEMAS/ SEMINAR

Provides students who have already completed Spanish 246 or 248 the opportunity to further explore development of film and film culture in Spain or Spanish America. Topics vary each time the course is offered. Sample topics from Spanish cinema include: Spanish and foreign constructions of national identity; narratives of female empowerment; selected film auteurs (Almodóvar, Borau, Buñuel, Saura). Sample topics from Latin American cinemas include: race, gender and ethnicity in various Latin American cultures; cinema as political intervention; selected film auteurs (Tomás G. Alea in Cuba, Emilio "Indio" Fernández in Mexico,

Fernando Solanas in Argentina). Mr. D'Lugo/ Offered periodically

259 INTRODUCTION TO GOLDEN AGE THEATER/LECTURE, DISCUSSION

An introduction to Spain's greatest playwrights-Lope de Vega, Tirso de Molina, Ruiz de Alarcón, Calderón de la Barca and sor Juana Inés de la Cruz. Conducted in Spanish. Prerequisite: Spanish 131 or permission. Mr. Ferguson/Offered periodically

260 THE AGE OF CERVANTES/LECTURE, DISCUSSION

Introduces Spanish literature and society in the Golden Age, from the era of Catholic monarchs to the death of Cervantes and beyond. Examines works in a variety of genres, tracing development of Spanish imagination from the flowering of Renaissance humanism through the Counter-Reformation and the birth of the baroque, a profile of brilliance and despair that characterizes Spain in these imperial centuries. Conducted in Spanish. Prerequisite: Spanish 131 or permission. Mr. Ferguson/Offered periodically

265 LATIN-AMERICAN POETRY/LECTURE, DISCUSSION

Beginning with colonial times and the poems of Sor Juana, students will read a generous selection of poems from all of Latin America. The course will emphasize the extraordinary flowering of poetic activity in the XX century. Conducted in Spanish. Prerequisite: Spanish 131 or permission. Mr. Ferguson/Offered periodically.

299 SEC. 7 ADVANCED TOPICS/ SEMINAR

Close readings and discussion of representative works by major Hispanic writers. Research project required. A required capstone course for senior majors. Variable topics for 2002-2004. Conducted in Spanish. Ms. D'Lugo, Mr. D'Lugo, Ms. Acosta Cruz, Mr. Ferguson/ Offered every year

GEOGRAPHY

Graduate School of Geography Faculty

David P. Angel, Ph.D., *associate provost and dean of graduate studies: urban-economic geography*

Yuko Aoyama, Ph.D.: *economic geography, regional planning*

Martyn J. Bowden, Ph.D.: *cultural humanistic and historical/urban/social geography*

J. Ronald Eastman, Ph.D., *director: geographic information systems, remote sensing, cartography*

Jacque L. Emel, Ph.D.: *resource/environmental geography, feminist theory*

Susan Hanson, Ph.D.: *urban/social geography, transportation, research methods, geography and gender*

Stanley R. Herwitz, Ph.D.: *biogeography, forest hydrology, watershed ecology, paleoecology, remote sensing*

Douglas L. Johnson, Ph.D.: *cultural ecology, arid lands management, land degradation, geography of the Middle East and North Africa, pastoral nomadism*

Roger E. Kasperson, Ph.D.: *hazards, global change, environment and society*

Nikolaus J. Kuhn, Ph.D.: *Physical Geography, soil hydrology, soil erosion, climatic change*

Laurence A. Lewis, Ph.D.: *land degradation, geomorphology, tropical agriculture*

Andy Merrifield, Ph.D.: *political theory, urban geography*

Robert Cameron Mitchell, Ph.D.: *environment and society, risk perception, survey research methodology*

Richard Peet, Ph.D.: *political economy of development, social theory, geography of consciousness and rationality*

Robert G. Pontius, Jr., Ph.D.: *geographic information science, environmental modeling, ecological sustainability, statistics*

Samuel J. Ratick, Ph.D.: *hazards, global change, environment and public policy, modeling, quantitative methods*

Dianne E. Rocheleau, Ph.D.: *political ecology; gender; forestry/agriculture/land use; culture/power/environment/development*

Henry J. Steward, Ph.D.: *cartography, remote sensing, history of the mapping sciences*

B.L. Turner II, Ph.D.: *human-environment relationships, global change, small holder and tropical land use*

Affiliate Faculty

Leonard Berry, Ph.D.

Robert W. Kates, Ph.D.

Staff

Anne Gibson, Ph.D., *manager: cartography and information graphics service, lecturer in geography*

Beverly Presley, A.M.L.S.: *map and geography librarian*

Emeriti

Gerald J. Karaska, Ph.D.

Duane S. Knos, Ph.D.

William A. Koelsch, Ph.D.

For the latest programmatic information, please see geography's web site (www.clarku.edu/departments/geography).

The Graduate School of Geography, established in 1921, is the oldest doctoral-granting geography department in the United States, and is consistently ranked among the elite programs in North America. The school also offers an undergraduate major which, for more than a decade, "Rugg's Recommendations on the Colleges" has identified as the best undergraduate geography major in America. The program emphasizes individual attention through close student-teacher relationships. The School also welcomes non-majors.

Geography faculty and graduate students engage the four realms of the discipline: nature-society relationships; space-society relationships; biophysical dynamics; and mapping sciences and spatial analysis. They conduct research on such issues as land use and environmental change, resource management institutions, rainforest canopy dynamics, gender issues across urban and rural locales, risk-hazard studies, and geographic education throughout the world.

The School is closely linked to Clark's George Perkins Marsh Institute, a center of collaborative, interdisciplinary research on human-environment relationships and environment and development. The Institute specializes in research on environmental risk and hazards, the human dimensions of global environmental change, regional and participatory development, and GIS applications. The Institute comprises three research centers and a research library.

The Center for Technology, Environment, and Development (CENTED), internationally recognized for its work on environmental risk and hazards, is home to the Greening of Industry Network, and examines land-use/cover change in various cooperative ventures, such as its links to Carnegie Mellon University's Center for Integrated Assessment. The Clark Labs for Cartographic Technologies and Geographic Analysis, home of the Idrisi GIS software, focus on remotely sensed data and geographical information systems for analysis to solve resource and environmental problems. The Center for Community Based Development (CCBD) addresses participatory and gender themes in development. Institute research is carried out worldwide with major efforts ongoing in Latin America, Africa, Asia, and Europe, as well as North America. Funded research in the Institute supports many geography and other graduate students.

The Marsh Institute Library houses some of the most extensive American research collections on global environmental change and on natural and technological hazards. In addition, more than 25,000 volumes and reports, 750 journals and newsletters, and various special collections cover the topics of technology, international development, water resources, and energy.

Undergraduate Program

Students undertaking a major in Geography are required to take a minimum of 10 Geography courses in accordance with the following guidelines:

1. **Four core courses.** Core courses emphasize core geographic concepts and ways of creating knowledge; courses in the core are designed to help build frameworks for understanding the world. Each of the core courses must be selected from one of the following broad disciplinary divisions:

- **Nature-Society.** How have societies used, shaped, and constructed nature? What are the impacts of various societies, economies, and cultures on ecological systems?

Core courses in nature-society:

- 017 Culture, Place, and the Environment
- 105 Keeping of Animals: Patterns of Use and Abuse
- 126 Living in the Material World: The Political Geography of Resource Development
- 132 Before and After Columbus: Ancient Middle America and the Impact of the Conquest
- 136 Gender and Environment
- 147 Critical Environmental Situations: Global and Local Perspectives
- 171 Ecology and Economy in the Tropics
- 179 International Political Ecology
- 180 The Earth Transformed
- 184 Landscapes of the Middle East

- **Society and Space.** How have space and location shaped economic, social, political, and cultural life? How have they shaped space and location? How is globalization changing these processes? How do these processes relate to the dynamics of urban life?

Core courses in society and space:

- 016 Geography of the Global Economy
- 127 Political Economy of the Third World Underdevelopment
- 142 Cities and Culture: The American City
- 170 Divided Cities/Connected Lives
- 196 Culture and Sport

- **Earth Sciences.** How does the geosphere interact with the hydrosphere, atmosphere, and biosphere?

Core courses in earth sciences:

- 014 Introduction to Physical Geography
- 101 Introduction to Geology
- 114 Intermediate Geomorphology
- 118 Environment and Disasters

• **Geographic Information Science.**

Geographic Information Science is concerned with the acquisition, storage, analysis and communication of geographic information. This includes applied skills in Cartography, Remote Sensing, Geographic Information Systems and Spatial Analysis.

Core courses in Geographic Information Science:

- 085 Introduction to the Mapping Sciences
- 190 Introduction to GIS

Each year, several 000- and 100-level courses are designated as core courses in each of these areas. In special cases, a 200-level course may be used to fulfill a core course requirement, subject to the approval of the student's advisor and either the Undergraduate Advisor or the Director of the School.

2. **Two skills courses.** Each student undertaking the Geography major is required to take Geography 141 Research Methods (offered each year) and one additional course in a skill area appropriate to the student's area of specialization, as detailed in their learning plan (discussed below). Formal approval of this elective skills course is implied by the advisor's signature on the learning plan.

Note that with the approval of the student's advisor, comparable courses in other departments can be substituted as skills courses. However, this does not reduce the total number of Geography courses required for the major. Thus students for whom a substitution has been granted will need to take an additional Geography course to ensure that a total of 10 courses are taken.

Geography skills courses:

- 110 Computer and Quantitative Methods in Geography: Introduction
- 113 Forest Hydrology

- 181 Introduction to Cartographic Design
- 189 Introduction to Remote Sensing and Geographic Imagery
- 190 Introduction to GIS
- 247 Computer and Quantitative Methods in Geography
- 255 Qualitative Research Methods Skills and Applications
- 260 Quantitative Modeling
- 292 Digital Cartographic Production Technology
- 293 Digital Image Processing
- 297 GIS and Local Planning

3. **Three specialization courses.** Majors are required to take three specialization courses, two of which must be at a 200-level and one of which may be either at a 100- or 200-level. Specialization courses are subject to approval by the student's advisor and must reflect a logical combination of courses as specified in the formal learning plan (see below). Formal approval of the elective specialization course is implied by the advisor's signature on the learning plan.

Specialization courses in geography:

- 200 Land Degradation
- 204 Watershed Ecology
- 205 Directed Research in Forested Ecosystems
- 211 African Environments and Geographical Implications
- 217 History of Cartography
- 218 Seminar in Physical Environment and Development
- 224 Economy and Environment
- 226 Seminar: Environmental Hazards Theory, Models and Applications
- 228 Management of Arid Lands
- 237 Feminism, Nature, and Culture
- 239 Country and Culture
- 240 End of America: Los Angeles
- 242 Cities and Culture: The European City
- 244 Gender, Work, and Space
- 250 Technology and Environmental Assessment
- 254 Car Trouble? Transportation, Environment, and the American Dream

255 Qualitative Research Methods: Skills and Applications
 256 Global Economic Geographies
 258 Utopian Visions, Urban Realities: Planning Cities for the 21st Century
 260 Quantitative Modeling
 261 Decision Methods for Environmental Management and Policy
 262 Urban Economic Geography
 271 Groundwater Hydrology and Management
 277 Gender, Environment, and Development
 280 Urban Ecology: Cities as Ecosystems
 281 Tropical Ecology
 284 Environment and Development in the Middle East and North Africa
 289 Advanced Development Theory
 294 Seminar in Cartography
 297 GIS and Local Planning

4. **A formal learning plan.** Each student is required to prepare a formal learning plan that establishes the logical connection between each of the specialization courses and the elective skills course. The learning plan is typically a single page in length, and requires signatures by each of the student, the faculty advisor, and the Director or the Undergraduate Advisor. This process of approval should normally be obtained before the end of the spring semester of the junior year, and must be completed before Senior Clearance will be granted.

5. **A Capstone course.** Capstone courses provide an integrative perspective within an area of specialization. Each year a series of capstone courses is offered. The chosen capstone should have a close logical connection with the student's specialization courses and is subject to the approval of the student's advisor. In special circumstances, a non-designated course may be substituted as a capstone with approval by the Undergraduate Advisor or the Director of the School.

6. **A research applications course.** Each student undertaking the Geography major is

required to take at least one Geography course within which they have undertaken an independent research project involving research design, data collection, analysis and a reporting of results. This course can also satisfy other requirements for the major and thus does not necessarily add to the total number of courses taken. This course may be a Directed Research (299) course that can satisfy one of the specialization requirements. It is also possible that a research-oriented capstone course can satisfy this requirement.

Requirements for the Dual Major in Geography

In accordance with University guidelines, the requirements for a dual major are identical to those of the individual major.

Requirements for the Minor in Geography

Students wishing to take a minor in Geography must complete the following components of the regular program of the major (for a total of seven courses):

1. **Two core courses.** Core courses emphasize core geographic concepts and ways of creating knowledge; courses in the core are designed to help build frameworks for understanding the world. Each of the core courses must be selected from one of the following broad disciplinary divisions:

- **Nature-Society.** How have societies used, shaped, and constructed nature? What are the impacts of various societies, economies, and cultures on ecological systems?
- **Society and Space.** How do space and location shape economic, social, political, and cultural life? How have the latter shaped space and location? How is globalization changing these processes? How do these processes relate to the dynamics of urban life?
- **Earth Sciences.** How does the geosphere interact with the hydrosphere, atmosphere, and biosphere?

- **Geographic Information Science.**

Geographic Information Science is concerned with the acquisition, storage, analysis and communication of geographic information. This includes applied skills in Cartography, Remote Sensing, Geographic Information Systems, and Spatial Analysis.

Each year, several 000- and 100-level courses are designated as core courses in each of these areas. In special cases, a 200-level course may be used to fulfill a core course requirement, subject to the approval of the student's advisor and either the Undergraduate Advisor or the Director of the School.

2. **One skills courses.** Each student undertaking the Geography major is required to take a minimum of one Geography skills course appropriate to their area of specialization. This course must be approved by the student's advisor.

Note that with the approval of the student's advisor, comparable courses in other departments can be substituted as a skills course. However, this does not reduce the total number of Geography courses required for the minor. Thus students for whom a substitution has been granted will need to take an additional Geography course to ensure that a total of 7 courses is taken.

3. **Three specialization courses.** Students taking the Geography minor are required to take three specialization courses, two of which must be at a 200-level and one of which may be either at a 100- or 200-level. Specialization courses are subject to approval by the student's advisor and should reflect a logical combination of courses.

4. **One elective geography course.** The seventh course in the Geography minor is an elective that can be taken at any level.

Honors Program

The Honors Program in Geography gives the advanced student the opportunity to conduct a major independent research project on a topic of interest to him or her. To graduate with

honors a student must successfully complete a two-semester independent honors project conducted under the supervision of a faculty advisor and one additional faculty member. Successful completion of the honors project will be recognized at Commencement. Most students will produce the honors thesis during their senior year although in some circumstances students may opt to enroll in the honors program for the spring semester of the junior year and fall semester of the senior year. Geography Honors is open to juniors who, by the end of the first semester of the junior year, have a minimum grade point average of 3.25 overall and 3.5 in the geography major and who can demonstrate the appropriate research background to undertake independent geographic research.

For further information about the Geography Honors Program and the Geography undergraduate major, please contact Marcia V. Szugda, undergraduate coordinator, at 508-793-7282 or fax 508-793-8881 or email: geography@clarku.edu and view our website (www.clarku.edu/departments/geography/publications.html). Undergraduate brochures are available in the Main Office of Geography and also may be mailed to prospective majors.

Graduate Program

The Graduate School of Geography has awarded more doctorate degrees than any other program in the United States. Students are not accepted for master's studies only, although many choose to earn that degree en route to their doctorate. The M.A. is also available to those who leave the program early. For information on the M.A. in Geographic Information Systems and International Development, see below.

Applicants with or without prior training in geography are welcome. Depending on their concentrations, students may be required to improve their knowledge of geography, cartography, quantitative methods, or research methods. Graduate Record Examination scores (verbal, quantitative, and analytical) are required

of all American and Canadian students. TOEFL scores or results of another English proficiency test are required for students from countries in which English is not the first language. The deadline for graduate applications is January 15th. All applicants receive careful consideration from a faculty-student admissions committee, which meets early in the spring semester to evaluate candidates. For further information and application materials, please view our website (www.clarku.edu/departments/geography/publications.html) for application materials, which may be downloaded, or contact the Graduate Admissions Coordinator, Madeleine Grinkis, in writing, or by telephone: (508) 793-7337/7336, fax: (508) 793-8881; or email: geography@clarku.edu.

Doctoral Program Requirements

Applicants should request a copy of current guidelines and degree requirements from the Graduate Admissions Coordinator (see above).

The graduate curriculum provides an opportunity for students to pursue studies across the full array of geography: human geography (space-society), human-environment geography (nature-society), biophysical geography, and the mapping sciences. Students are encouraged to explore faculty and research interests across these geographies in combination with work in complementary fields and disciplines within and outside of Clark.

Requirements include 16 course credits (eight for those entering with an M.A.); satisfactory completion of doctoral examinations; fulfillment of a skills requirement; and completion, acceptance, and successful defense of a dissertation. Also required are three years of residence (or two and one-half for those entering with an M.A. in geography). The normal course load is three courses per semester. The usual sequence students follow is: coursework, doctoral exam, research proposal, and dissertation research, write up, and defense.

In the first year, students normally complete the two required courses, Geography 318 Explanation in Geography and Geography 368

The Development of Western Geographic Thought, and take additional courses to help refine their interests. Students then meet with advisors for evaluation and planning.

In the second year, students are encouraged to fulfill the skills requirement, to prepare for doctoral exams, and to begin dissertation proposal formulation. Course work normally includes seminars, directed readings, and directed research. A review of the student's progress is held at the end of the year.

Students who have not already completed their doctoral exams and dissertation proposal are expected to do so in the third year of study.

Students must demonstrate, through course work or examination, proficiency in two of the following areas: multivariate statistics, research design/research methods, geographic information systems, foreign language, or other courses approved by the student's faculty advisor and the director of the Graduate School of Geography.

The doctoral exam assesses the competency of a graduate student in one major and two minor fields. Competency is defined as an understanding of the substantive content and range of theoretical approaches within each subfield. Students must be able to critique the alternative research traditions and defend the theoretical frameworks they adopt. They are expected to have in-depth knowledge of the major field, to master a survey of the first minor field, and to demonstrate detailed knowledge of a single subfield in the second minor.

The doctoral examination is conducted orally. The examination in the major field lasts approximately one and a half hours, and each minor takes about 45 minutes. At the student's discretion, the major and/or first minor may have a written component, which is in addition to the oral examination.

A formal proposal for dissertation work must be completed and approved by a committee of at least four faculty, one of whom is from outside the School. The proposal is approved after a formal defense before the committee.

The process of conducting and writing up the dissertation research involves close interaction between student and committee members. After extensive criticism and rewriting, a draft thesis is defended at a working session of the committee. A final version incorporating changes suggested at the draft stage is submitted for approval by the dissertation committee. At the discretion of the committee, the director and the student, a public presentation and dissertation signing ceremony may be scheduled.

M.A. in Geographic Information Sciences for Development and Environment

The International Development Program and the Graduate School of Geography offer this specialized degree for early and mid-career professionals with responsibilities in mapping, environmental database development, resource management, planning, and policy implementation and monitoring. The 12-month time frame enables professionals to take a one-year leave of absence to complete the degree. The program is technically oriented with an emphasis on integration with social aspects of international development required of the practicing GIS analyst. For further information, please contact the International Development Program: telephone: (508) 793-7201; fax: (508) 793-8820; e-mail: id@clarku.edu.

Distinctive Features

Office, study, and research facilities include three earth science and geographic information systems (GIS) laboratories, a soils lab and the Hadwen Herbarium, the Map Library, a reserve library, a cartographic productions lab, and work, lounge, and personal computing rooms for graduate students.

Founded in 1921, the Guy H. Burnham Map and Aerial Photograph Library is an active cartographic information center. The collection contains 230,000 maps, imagery, digital data, GIS and mapping software, atlases, journals, globes, reference materials, and tourist information. As a depository for the

U.S. Government Printing Office, the Map Library houses a full array of maps and electronic products published by the federal government. For the latest Map Library information, visit our web site (maplib.clarku.edu).

The J.K. Wright Reading Room and the Libbey Seminar Room contain regularly updated publications in the field of geography and subscriptions to geography journals. These facilities serve as a reserve library/reading room for many geography courses. Also see Marsh Library above.

CoFERT (Computer Facility for Environmental Research and Teaching) is a new facility created by gifts from the Culpeper and Keck Foundations. It supports research in Geography, the Marsh Institute, and the Environmental School requiring large data sets and advanced computer-based analyses. The lab has a Windows NT server capable of handling a large number of clients. Additional hardware includes Pentium NT workstations and other data input and output peripherals, such as a large format color printer, a flat-bed scanner, slide scanner, CD-writers, and large format digitizers.

The Geography Computer Lab is primarily a teaching lab for such courses as GIS, automated cartography, statistics, and physical geography. The lab has 12 Windows NT workstations and full access over the network to specialized equipment in the CoFERT Lab. Software supported includes Idrisi, ArcView, ArcInfo, ERDAS, Delphi, and a variety of products for numerical and statistical analysis.

The School also affords students access to Clark Labs and the Idrisi (GIS) Project, complete with a suite of hardware and data connections directed to the use of GIS and remote sensing (See Marsh Institute above). The Idrisi GIS software, developed by Ronald Eastman, is produced here and is used by the United Nations and more than 25,000 users worldwide.

The Clark University Cartography and Information Graphics Service, staffed by a resident cartographer, produces publication-quality

maps and information graphics for university and non-university clients. All graphics are created in digital format using either Macintosh or PC platforms and mapping, graphic design, and desktop publishing software. The Service has access to a color scanner, slide scanner, a color laser printer, and large-format ink-jet printer.

The School houses a geological collection and the Hadwen herbarium. It also supports the Tower Hill Research Station based at the Tower Hill Botanic Garden in the Wachusett Reservoir watershed. The Station is equipped with continuously recording meteorological instrumentation. Research at this site is complemented by the School's soil lab. Students have used these facilities to quantify evaporation losses from forested ecosystems and hydrochemistry of snowmelt dynamics.

Publications/Reports

A professional, internationally peer-reviewed journal, *Economic Geography* is edited by David Angel. Founded at Clark University in 1925, *Economic Geography* is committed to publishing the best theoretically-based empirical articles that deepen the understanding of significant economic geography issues around the world.

The Geography Newsletter is published regularly for undergraduates and the Monadnock Newsletter is the School's alumni publication. The CENTED and Marsh Institute publication series includes work by numerous members of Geography. The Environmental School Research Station reports forest and soil hydraulic inventories to the MDC (Massachusetts Metropolitan District Commission) Division of Watershed Management. The data provided is used to assist with their forest management decisions in the Wachusett watershed.

Student Organizations

Undergraduates are served by the Geographical Student Organization (GSO) and Gamma Theta Upsilon (GTU), a geographic honors organization. Clark University Geographical Society (CUGS) serves the graduate students.

Courses

014 WEATHER, CLIMATE, AND LANDFORMS/LECTURE, LABORATORY

A basic inquiry into the principles and components of landforms and climates. Provides background for evaluating environmental problems, including the role of human activities on physical processes. A science perspective (SP) course. Mr. Lewis/Offered every year

016 INTRODUCTION TO ECONOMIC GEOGRAPHY/LECTURE, DISCUSSION

What are the economic logics behind the formations of manufacturing zones, shopping malls, and residential areas, and how are they affected by globalization? This course introduces theories of industrial location and regional development in the global context, with real world examples. It includes discussions on the role of technological progress, industrial organization, and policy in shaping the locations of production and services. Ms. Aoyama/Offered every year.

017 CULTURE, PLACE, AND THE ENVIRONMENT/LECTURE

Ecological and historical approach to cultures and cultural change in a spatial context. Broad themes and problems of North America: adaptation to "natural" environment; culture in prehistory; migration; creation of cultural areas; world views of primitive, traditional, and industrial culture; cultural landscape; cultural geography of the U.S. One weekly discussion section. A comparative perspective (CP) course. Mr. Johnson, Mr. Bowden/Offered every year

020 INTRODUCTION TO URBAN GEOGRAPHY/LECTURE, DISCUSSION

Cities are massive and problematic human creations, and they draw their character and problems from the diverse people who inhabit them. At the same time as people shape their physical and social surroundings, the physical and social surroundings also shape people. Thus, a complex two-way process unfolds which this course will explore using examples from North America. American cities have changed dramatically during the last hundred years. Often urban change

reflects demographic, economic, political and cultural changes. In response, different theoretical approaches have arisen to explain changing socio-spatial trends. Four identifiable approaches will frame these twice-weekly classes: quantitative and descriptive approaches, derived partly from neoclassical economics and functionalist sociology; behavioral approaches that react against economic determinism and look at actual human experience and decision-making; structuralist approaches, emphasizing the constraints on human behavior imposed by social "structures" and powerful interests and institutions; and "post-structuralist" approaches that try to accommodate difference and ambiguity, multiculturalism and gender, in explanations about contemporary city dynamics, and look at how new Diasporas of peoples have fractured solid identities, as well as catalyzed new urban forms. Mr. Merrifield/Offered every year

085 INTRODUCTION TO THE MAPPING SCIENCES/LECTURE, LABORATORY

Introduces mapping sciences in relation to geography. Covers geodesy, surveying, cartography, airphoto interpretation, photogrammetry, remote sensing, and geographical information systems. The topics are studied separately and as integral elements in the emerging field of spatial information systems. For first-year students, majors and non-majors. A science perspective (SP) course. Mr. Steward/Offered every year

101 INTRODUCTION TO GEOLOGY/LECTURE

An introduction to the basic principles of physical and historical geology. Topics covered include the formation of earth and earth materials, plate tectonics, land-form evolution, glaciology, and the history of life. The processes the shape the surfaces of other planets in our solar system are also considered. Mr. Herwitz/Offered every year

105 KEEPING OF ANIMALS: PATTERNS OF USE AND ABUSE/LECTURE, DISCUSSION

Animals play a prominent role in human life. They sustain us, entertain us, and provide companionship and solace. Pests and predators compete with humans for food, while harmful

diseases lurk unseen in animal reservoirs. Images of goodness and evil reflect the ambivalent attitudes and cultural prejudices that govern human responses to animals. This course explores the cultural, historical, and ecological interactions between people and animals. Balances utilitarian and ethical perspectives on current patterns of animal use and abuse. A comparative perspective (CP) course. One weekly discussion section. Mr. Johnson/Offered every other year

107 MIRACLES OF ASIA: ECONOMIC GROWTH IN GLOBAL CONTEXTS/ LECTURE, DISCUSSION

What explains the rapid rise of Asian economies, and what prompted the sudden crises? This course provides a foundation in understanding the primary factors in the most successful form of Industrialization in the latter 20th Century, by focusing on the role of the state, export-led industrialization, and industrial organization of Japan and Newly Industrializing Economies of East and Southeast Asia. Major issues discussed include impacts of rapid industrialization on the standard of living, housing, ethnic relations and resource extraction. Ms. Aoyama/Offered every year.

110 COMPUTER AND QUANTITATIVE METHODS IN GEOGRAPHY: INTRODUCTION/LECTURE

Introduces the role of the computer in geographic and statistical analysis. Considers data sampling and descriptive and inferential statistical techniques for analyzing geographic data. Includes graphic techniques, tests of hypotheses, and regression. Students use computer programs for statistical analysis. Although no prior exposure to computers or statistics is assumed, the course is suitable for students of all levels and is one for which graduate students may receive credit. A skills course for geography majors. A formal analysis (FA) course. Staff/Offered every year

113 FOREST HYDROLOGY/RESEARCH

Students have a unique opportunity to conduct field research and gain experience acquiring hydrological data on evapotranspirational loss from local mixed-pine and broad-leaved

deciduous forests. Field and laboratory research leads to the preparation of a formal article that conforms to the specifications of a scientific journal. The objective of the research is to evaluate how different vegetation types affect water resources. Mr. Herwitz/Offered every year

114 INTERMEDIATE GEOMORPHOLOGY/LECTURE

Examines the processes resulting in landform diversity. Emphasizes fluvial processes and climate/landform relations. Prerequisite: Geography 014 or permission of instructor. Mr. Lewis/Offered every other year

118 ENVIRONMENT AND DISASTERS/LECTURE

Examines basic concepts and processes within the earth sciences, relative to the evaluation of risks and decisions on future policies of land use and resource utilization. Emphasizes aspects of the environment of particular interest to geographers, geologists, and planners. Prerequisite: Geography 014 or permission of instructor. Staff/Offered every other year

126 LIVING IN THE MATERIAL WORLD: THE POLITICAL GEOGRAPHY OF RESOURCE DEVELOPMENT/LECTURE, DISCUSSION

Focuses on institutions that govern the development, allocation, and use of natural resources like water, minerals, trees, and animals. Emphasizes approaches used by geographers to study natural resources. Case studies provide an opportunity to examine differences between societies (or economies) and between specific resource issues. Water in the western U.S., Israel, or India; gold in Ghana, the U.S., and South Africa; and animal use in India, Great Britain, and China are some examples of typical cases. A comparative perspective (CP) course. Ms. Emel/Offered every other year

127 POLITICAL ECONOMY OF DEVELOPMENT/LECTURE

Surveys the leading theories of development: classical, neoclassical, and Keynesian economies, social modernization theory, Marxist and neo-Marxist theories, post-structural critiques, post-developmentalism, feminism, and feminist critiques of development. A comparative perspective (CP) course. Mr. Peet/Offered every year

132 BEFORE AND AFTER COLUMBUS: ANCIENT MIDDLE AMERICA AND THE IMPACT OF THE CONQUEST/LECTURE

What were the human-environment conditions and dynamics in Middle America (Caribbean, Central America, Mexico) previous to, and since, 1492? Approaches these questions from archaeology, history, and environmental studies, placing them within cultural ecology perspectives. Mr. Turner/Offered periodically

136 GENDER AND ENVIRONMENT/LECTURE, DISCUSSION

Explores how gender is reflected in the landscape, in our settlement and land use patterns, in environmental history, and in our present ecological science and practice from the global to the local level. Combines lectures, readings, discussions, films, and local field trips. Reviews feminist and other alternative explanations of the gendered nature of knowledge, access, use, and control of space and resources in environments —past, present, and possible. Regional focus on New England. A values perspective (VP) course. Ms. Rocheleau/Offered every year

137 TIME AND SPACE IN OLD AND NEW ENGLAND/LECTURE

Uses cases from old and New England to demonstrate the skill, methods, and sources of cultural, historical and humanistic geography in the towns and fields of New England and in texts of both Englands. Dating techniques; pre-historic chronology; estimating past populations; toponymy; linguistic and lexical evidence; archeology and the ground itself; archival and literary evidence; aerial photography, vernacular and high-style architecture. Mr. Bowden, staff/Offered every other year

141 RESEARCH METHODS IN GEOGRAPHY/LECTURE, DISCUSSION

Focuses on ways empirical social science research is conducted. Students study problems, methodological strategies, and analytical techniques characteristic of current social geographical research. Includes defining a research problem, measurement, sampling, research design, analysis, and writing the report. A for-

mal analysis (FA) class, and a required skills course in the geography major. Mr. Mitchell, Staff/Offered every semester

142 CITIES AND CULTURE: THE AMERICAN CITY/LECTURE AND FIELD TRIP

Studies development of distinct subcultures in America and in cultural capitals. Emphasizes expression of culture in Boston, Philadelphia, New York, Chicago, San Francisco, and Los Angeles, and in distinctive regional cultural capitals of Charleston, Salt Lake City, Santa Fe, and New Orleans. Mr. Bowden/Offered every year

144 RESEARCH APPLICATIONS/LECTURE, DISCUSSION

Extends the theory of research methods taught in Geography 141 and other classes into applied practice. Students identify a real world problem, collect data, write a publishable quality analysis, and present research results orally. Typically research projects are linked to Clark's CoFERT (Computer Facility for Environmental Research and Teaching) and focus research on the Blackstone Valley (water resource management historic preservation), eastern Worcester County (urban planning and land use problems on the suburban fringe of greater Boston), northern and western Worcester County (farming and open space issues), and Worcester itself (especially Main South). The course features small group research teams and stresses practical applications of geographic theory, content, and research skills.

Prerequisite: Geography 141. A required skills course in the geography major. Ms. Aoyama, Mr. Merrifield/Offered every semester

147 CRITICAL ENVIRONMENTAL SITUATIONS: GLOBAL PERSPECTIVES/LECTURE, DISCUSSION

Examines major human activities driving changes in the global environment, such as population growth, urbanization, technology, and the global economy. Considers the effects of such changes on critical situations in such regions and places as the Sahel, the Everglades, the Aral Sea, Mexico City, and Amazonia. Draws larger lessons for post Earth Summit initiatives to build a more sustainable world. A

comparative perspective (CP) course. Mr. Kasperson/Offered every year

170 DIVIDED CITIES, CONNECTED LIVES/LECTURE, DISCUSSION

Examines spatial patterns of social groups in American cities and considers how these patterns are maintained or changed over time. Considers how these patterns affect functioning of cities, provision of social services and social change, as well as how they divide and unite different cultural groups. A comparative perspective (CP) course. Ms. Hanson/Offered every other year

179 INTERNATIONAL POLITICAL ECOLOGY/LECTURE, DISCUSSION, FIRST-YEAR SEMINAR (IN ALTERNATE YEARS)

Integrates ecology and political economy from local to global scale through case studies. Starts from a view of people in environmental "hot spots," following links to world economy and planetary ecosystems. Explores connections of international environmental and economic policy with everyday realities and possible ecological futures of people from the Amazon rainforest to the streets of Worcester. Offered as a first-year seminar (fulfills the comparative perspective (CP) and verbal expression (VE) requirements), and as a lecture course (fulfills the comparative perspective (CP) course requirement) alternate years. Ms. Rocheleau/Offered every year

180 THE EARTH TRANSFORMED BY HUMAN ACTION/LECTURE, DISCUSSION

Traces the course of human modification and transformation of the earth since antiquity, but with particular emphasis on the last 300 years. It examines the changing kind, pace, and magnitude of alterations and explores interpretations of their causes from the perspective of integrated human-environment science. VE and Non-VE sections. Mr. Turner/Offered every year.

181 INTRODUCTION TO CARTOGRAPHIC DESIGN/LECTURE, LABORATORY

Introduces fundamental principles of cartographic design. Emphasizes the need to reconcile graphic representation with geographic

description, on both intellectual and practical levels, for the map-user. Ranges from concepts of space and spatial representation to information handling techniques and the perceptual basis of graphic communication. A skills course in the geography major. Mr. Steward/Offered every year

184 LANDSCAPES OF THE MIDDLE EAST/LECTURE, SEMINAR

An array of landscapes, economies, and cultures comprise the Middle Eastern culture realm. Studies modernization and transformation of traditional Islamic and non-Islamic life and livelihood in the Middle Eastern cultural mosaic. Literature and ethnographic description supplement geographic analysis. Mr. Johnson/Offered every other year

187 THE IMAGE OF THE WORLD: THE HISTORY OF MAPS AND MAP MAKING/FIRST-YEAR SEMINAR

An introduction to the history of cartography centered around the idea of the map as the "mirror of culture." That is, how cartography, while being set against a geographical background, has always been deeply connected to historical events, trends in intellectual thought, changes in society, and advances in technology. The course will range worldwide, cover a time-period from earliest times to the present, deal with the products of explorers, surveyors, mariners, philosophers, scientists, writers, politicians, and others. Use will be made of the holdings in the University Map Library and the Rare Book Room, and may also involve outside field trips. Offered in the Spring 2003 semester. Fulfills the historical perspective. First preference will be given to students in the International Studies Stream. Others will be admitted on a space available basis. Mr. Steward/Offered every year

189 INTRODUCTION TO REMOTE SENSING AND GEOGRAPHIC IMAGERY/LECTURE, LABORATORY

Introduces a powerful methodology for surveying and analyzing geographical phenomena. Examines aerial photography and satellite imagery and their analysis for interpreting, understanding, and representing the environ-

ment. Includes image-mapping, photogrammetry, and field surveying. A skills course in the geography major. Mr. Steward/Offered every year

190 INTRODUCTION TO GIS/LECTURE, LABORATORY

Introduces GIS as a data management, analysis, and mapping tool. Stresses fundamental logic and scope of problem solving using raster and vector systems. Although the course is computer-oriented, no programming is involved. Graduate students may receive credit for this course. A formal analysis (FA) course. Counts as skills course or core course in Mapping Sciences/Spatial Analysis in geography major. Mr. Eastman, Mr. Marciano/Offered every semester

196 CULTURE AND SPORT/LECTURE, DISCUSSION

Readings in humanities "texts," film, and social sciences frameworks explore track and field, boxing, cricket, baseball, soccer, rugby, football, basketball, hockey, and tennis. Includes the relation between game character and structure and their success among different groups of Americans; the timing of game adoption; explanations for the transformation of the games from British and early forms; and deviation of professional and amateur variants. The class period is extended occasionally for special events (e.g., films). Mr. Bowden/Offered every other year

200 LAND DEGRADATION/SEMINAR

Resource use often results in degradation of aquatic and terrestrial productivity. Roles of agriculture, deforestation, urbanization, and industrialization on land degradation problems are examined in a contemporary and a historical framework. Mr. Lewis, Mr. Johnson/Offered every other year

204 WATERSHED ECOLOGY/SEMINAR

Examines current scientific literature on the functional ecology and biogeochemistry of contrasting terrestrial ecosystems. Includes inputs, outputs, and internal transfers of water and nutrients in temperate hardwood forests, pine barrens, tropical rainforests, montane cloud

forests, eucalypt woodlands, and arid environments. Emphasizes processes of rock weathering, leaching from above-ground vegetative surfaces, nutrient uptake by plants, atmospheric inputs, and stream discharge of nutrients. By permission only. Mr. Herwitz/Offered every other year

205 APPLIED ENVIRONMENTAL ASSESSMENT IN A FORESTED WATERSHED

A field-based research seminar that focuses on the collection and analysis of data required for environmental assessment, covering geology, geomorphology, soil, hydrology, and vegetation. The data analysis is centered around current issues such as water quality, land use, and climatic change. Aim is to identify environmental unknowns by critically analyzing the effectiveness of assessment methods to reflect actual environmental conditions. Students have to present the results of the field and laboratory work and prepare a final report, which includes a description of the current condition and the potential impact of land use and/or climatic change. Mr. Kuhn/Offered every year

206/306 GIS AND LOCAL PLANNING/SEMINAR, PROJECT

Explores issues and procedures involved in the application of GIS to local government planning. Develops hands-on familiarity with the Arc/Info vector-based system, and its application in database development (data conversion), routine data management, and planning activities. Prerequisite: Geography 190 and permission. Mr. Marcano/Offered every year

207/307 SOIL EROSION: FROM MEASUREMENT TO RISK ASSESSMENT

Skill course including data collection, analysis and preparation of a report on erosion risk in central Massachusetts. The course focuses on the effects of on-site soil loss, off-site effects, in particular the risks of non-point source pollution, and the use and limitations of common planning tools such as the RUSLE and WEPP for erosion risk assessment. The course requires field and laboratory work, including soil sampling and mapping, basic soil analysis in the laboratory, collection of rainfall, runoff

and erosion data during natural storms and rainfall simulation tests. Students have to present the results of the field and laboratory work in class and prepare a report on erosion risk based on the data collected in the study area (probably Tower Hill). Mr. Kuhn/Offered every year

211 AFRICAN ENVIRONMENTS AND GEOGRAPHICAL IMPLICATIONS/LECTURE, DISCUSSION

Through an examination of the five major environmental conditions found on the continent, a series of topics will be examined. In particular, relationships of the environment to the patterns of political change from precolonial to the present, land degradation and urbanization will be explored. Mr. Lewis/Offered periodically

217 HISTORY OF CARTOGRAPHY/SEMINAR

An introductory survey based on the idea of the map as a mirror of culture. Material ranges in place, time, and context, from the fragmentary records of ancient map-making and the impulses behind empires and exploration to the statecraft and complexities of the 20th century. Individuals, technologies, motivations, and historical settings are all examined. A historical perspectives (HP) course. Permission of instructor required. Mr. Steward/Offered every year

218 SEMINAR IN PHYSICAL ENVIRONMENT AND DEVELOPMENT/SEMINAR

The world is changing more rapidly than at any time in history. This course reviews the patterns of change in the Third World, examines the role of environment and resource management in development, and allows students to develop their own in-depth case studies. Permission of instructor required. Mr. Lewis/Offered every other year

224 ECONOMY AND ENVIRONMENT/LECTURE, DISCUSSION

Addresses historic intersection of industrialization, urbanization, and ecology. Examines economic, environmental, and political conflict over the past 300 years to gain historic depth

on contemporary issues. London air pollution, New York City water supplies, mechanized fishing in the Pacific, European coal mining, and American forestry product industries will be considered. Ms. Emel/Offered periodically

226 SEMINAR: ENVIRONMENTAL HAZARDS—THEORY, MODELS, AND APPLICATIONS/LECTURE, DISCUSSION

Theory and methods of hazard assessment and social response. Covers natural, technological, and global hazards and includes such topics as human vulnerability, disasters, public perceptions, social amplification of risk, social learning, and corporate management of risk. Mr. Golding and Mr. Kasperson/Offered every year

228 MANAGEMENT OF ARID LANDS/LECTURE, SEMINAR

The world's drylands present special development problems. Prone to degradation, they face the difficult task of providing support to a rapidly growing population. The history, demography, behavioral characteristics, social and livelihood systems, and physical constraints of dryland ecosystems are analyzed. Evaluates management strategies, identifying the obstacles constraining their growth, and assesses the future development and application potential of drylands. Mr. Johnson/Offered every other year

237/337 FEMINISM, NATURE, AND CULTURE/SEMINAR

Studies feminist theories of science, rationality, and morality—particularly as they apply to nature-society relations. Examines cultural politics of "nature" across time and space. Film, literature, government reports, and academic writing show how images and "truths" about nature and society are constructed. Ms. Emel/Offered every other year

239 COUNTRY AND CULTURE/LECTURE, DISCUSSION

The landscape can be read! Be it a vast tropical rainforest with an occasional clearing or an intensively cultivated river valley in New England, the rural landscape is the product of an interaction between people (culture) and place (environment). The course traces the

evolution of rural landscapes through time and space from early hunter-gatherers to modern suburban encroachment on rural areas.

Emphasis is placed on ecological and cultural principles that help to explain the technocultural modification of rural places.

Mr. Johnson/Offered every other year

240 THE END OF AMERICA: LOS ANGELES/LECTURE, DISCUSSION

The modern city reflects the values and forces that have shaped Western culture in its westward course. Los Angeles—the western end of American space—provides a unique model for examination of the American cultural spirit. This course explores changing notions of the city and the American attitude toward the culture of cities through close examination of history, geography, literature, and film associated with Los Angeles. Mr. Bowden/Offered every other year

242 CITIES AND CULTURE: THE EUROPEAN CITY/LECTURE

Examines the city as a center of cultural stability and cultural change as reflected in urban form. Focuses on the city as a center of creativity. Includes London, Edinburgh, Paris, Vienna, and Manchester. Mr. Bowden/Offered every other year

244 GENDER, WORK, AND SPACE/SEMINAR

Examines how gender, race, class, and ethnicity divide the work force and how location and space shape and sustain such divisions. Evaluates competing explanations for why women, youths, and minorities hold jobs that differ distinctly from jobs held by other workers. Explores how a geographic understanding of gender, class, and ethnicity can help explain the current restructuring of the global economy. Ms. Hanson/Offered every other year

247/347 COMPUTER AND QUANTITATIVE METHODS IN GEOGRAPHY/LECTURE, LABORATORY

Continues development, begun in Geography 110 of computer-based methods in geographical analysis. Focuses on bivariate and multivariate regression, discriminant analysis, factor analysis, log-linear models, and analysis of spatial and temporal data. Includes lab work with

PCs, spreadsheets, and SPSS-X statistical software package. Prerequisite: Geography 110. Meets skill requirement for geography majors and graduate students. Mr. Ratick/Offered every year

250 TECHNOLOGY AND ENVIRONMENTAL ASSESSMENT/SEMINAR

A survey of analytic techniques used in evaluating environmental conditions and the impacts of technology. These techniques consist of formal methods such as cost-benefit, risk-benefit, cost effectiveness, and decision analysis. They also include methods used to elicit human judgement and behavioral responses in evaluating complex environmental and technical systems. Draws on case studies and teaches students to make both quantitative and qualitative assessments. Mr. Ratick/Offered every year

254 CAR TROUBLE? TRANSPORTATION, ENVIRONMENT, AND THE AMERICAN DREAM/LECTURE, DISCUSSION

Mobility and access are essential to individuals and to urban areas, yet congestion and poor access remain serious problems. Examines urban transportation planning and evaluates proposals for solving transportation problems. Includes transportation and land use; energy, equity, and environmental issues; the almighty automobile; and the politics of urban transportation. Ms. Hanson/Offered every other year

255 QUALITATIVE RESEARCH METHODS: SKILLS AND APPLICATIONS/LECTURE, DISCUSSION

Students learn to select, combine, apply and evaluate a broad repertoire of selected qualitative research methods from geography, anthropology, planning, cultural studies, women's studies, international development and the social sciences more generally. Also includes more environmentally-oriented methods (also selected) such as mapping, planning, landscape and narrative techniques used in environmental history. These methods, as well as the overview and analytical framework presented in the course, should be useful in community service, public social and environmental ser-

vices, commercial and private sector applications and academic research settings. A skill or specialization course in the geography major, and a graduate student skill course. Cross listed with International Development and Environmental Science and Policy. Ms. Rocheleau/Offered every year

256 GLOBAL ECONOMIC GEOGRAPHIES/LECTURE, DISCUSSION

How interdependent are different regions and countries in this era of the global economy? We will explore the dynamics of economic interdependence through international production, trade, and financial flows. The pros and cons of free trade vs. managed trade and the roles of multinational firms and technology transfer will be analyzed along with national and regional responses to global competition. Ms. Aoyama/Offered every other year.

258 UTOPIAN VISIONS, URBAN REALITIES: PLANNING CITIES FOR THE 21ST CENTURY/LECTURE, DISCUSSION

Although utopia literally means "no place," utopian thinking has always involved certain material expressions of daily living. The legacy of early urban utopian thinkers is evident in contemporary approaches to urban policy, including urban form and design, redevelopment, urban politics, and planning. In this course students will grapple with the ideals of urban planning in the context of the complexities of contemporary cities. Ms. Hanson/Offered every other year

259/359 AMERICAN WEST AS IMAGE, SYMBOL, & MYTH/LECTURE, DISCUSSION

From the first, Americans made the West what they wanted it to be: Garden of the World, Passage to India, Great American Desert, Great Prairie, or Garden in the Grassland. A westering people invested this land with heroes, hunters, horse-riding Indians, trappers, scouts, cowboys, oil magnates, land boomers, and movie tycoons. The West presents a kaleidoscope of images of both outsiders and insiders, and this course considers the origins and changes in these images, their effects on behavior, and their imprint on the land.

Emphasis throughout is on the methods and skills of those concerned with reconstructing the geographical knowledge (geosophy) of people of different backgrounds, roles, regions, and times. Mr. Bowden/Offered every year

260 QUANTITATIVE MODELING/LECTURE, DISCUSSION/LABS

Investigates the quantitative and qualitative potential of using mathematical computer models to guide policy in human/environment systems. Students learn to think with a systems perspective while translating their own conceptual models to mathematical models to computer models. Includes lab sessions in the computer room and lectures/discussions in the classroom. The course culminates in written and verbal presentations of student projects. Students will gain technical proficiency in the spreadsheet software Excel and other software designed for sustainability analysis. Students can apply what they have learned in Calculus, Statistics, and Ecology and Economy in the Tropics. Prerequisites are Math 121 or Math 125 or graduate standing. A skill or specialization course in the geography major. Cross listed with International Development. Mr. Pontius/Offered every year

261 DECISION METHODS FOR ENVIRONMENTAL MANAGEMENT AND POLICY/LECTURE, DISCUSSION

See ES&P 261. Mr. Ratick/Offered every year

262 URBAN ECONOMIC GEOGRAPHY/SEMINAR

The past two decades have been a period of particular vitality in development of theory, new perspectives, and alternative discourse about the city and the contemporary urban experience. This course examines recent developments in urban geography and details a political economy of urbanization in advanced capitalist societies. Staff/Offered every other year

263 ATMOSPHERE AND CLIMATE CHANGE/LECTURE, SEMINAR

Introduces atmospheric dynamics and the physical aspects of climatic change with a special focus on the role of weather patterns as driving force of processes in the hydrosphere

and biosphere, changes in regional weather patterns, and quality of climate prediction models. Background information is presented in lectures. Students are required to read, present, and discuss selected papers and write two essays. Mr. Kuhn/Offered every year

271 GROUNDWATER HYDROLOGY AND MANAGEMENT/LECTURE, DISCUSSION

Introduces geological and hydrological factors controlling the occurrence and development of groundwater, and the methods and impacts of groundwater management. Ms. Emel/Offered periodically

277 GENDER, ENVIRONMENT, AND DEVELOPMENT/SEMINAR

Considers gendered identities, affinities, control, responsibility, knowledge, labor, and benefits in the definition, use, management, and protection of environments. Readings, lectures, and discussion focus on the distinct perspectives and concerns of women and men as actors in natural resource use and management and in local, regional, and global ecological transformations linked to economic restructuring. Ms. Rocheleau/Offered every year

280/380 URBAN ECOLOGY: CITIES AS ECOSYSTEMS/LECTURE, DISCUSSION

Explores ecology and physical geography of cities as systems built, inhabited, and “managed” by people. This class of ecosystem is often neglected except in studies of pollution, yet it is home to many of the world’s people and to a surprising number of plant and animal species as well. Readings, lectures, discussion, and written work combine landscape and systems ecology with physical and urban geography to broaden our understanding of city environments, both present and possible. Ms. Rocheleau/Offered periodically

281 TROPICAL ECOLOGY/LECTURE, DISCUSSION

Examines structure and function of several major tropical ecosystems (rainforests, savannas, wetlands, coastal zones, deserts) from the perspective of systems ecology. Readings, lectures, and discussions focus on energy flows, material cycles, and species diversity and distribution. Explores pattern and process in tropical

ecosystems (especially forests and savannas) under conditions of widespread land use change. Ms. Rocheleau/Offered every other year

284 ENVIRONMENT AND DEVELOPMENT IN THE MIDDLE EAST AND NORTH AFRICA/LECTURE, DISCUSSION

From Afghanistan to Morocco, farmers, herders, and city dwellers have modified their environment in an effort to develop the region's resources. While many of these changes have been destructive, others have produced sustainable agricultural systems. Today population growth, infrequent zones of high agricultural potential, the constraints imposed by aridity, and limited mineral resources (except for oil) restrict development opportunities. The successes and failures that have followed from the efforts of Middle Eastern governments and societies to cope with these limitations and to control desertification, overgrazing, salinization, deforestation, and urban plight constitute the focus of this course. Prerequisite: any geography nature-society core course (e.g., 105, 184) or in International Development, or by permission of instructor. Mr. Johnson/Offered every other year

289/389 ADVANCED DEVELOPMENT THEORY/SEMINAR

A research seminar for students with some background in development theory. The seminar critically examines recent tendencies in development theory and practice. Mr. Peet/Offered every year

292 DIGITAL CARTOGRAPHIC DESIGN AND PRODUCTION/LECTURE, LABORATORY

Studies production and design of full-color, publishable-quality maps using computer technology, with special attention paid to meeting the requirements for offset lithographic printing and web display. Students design and produce monochrome and full-color maps on computer using professional graphic design software. Prerequisite: Geography 085, 181 or 190, or permission of instructor. Mr. Eastman, Ms. Gibson/Offered every other year

293 DIGITAL IMAGE PROCESSING/LECTURE, LABORATORY

Examines the range of digital procedures used for the restoration, enhancement and classification of remotely sensed imagery. A strong emphasis is placed on the acquisition of skills that can be applied in the development of data layers for GIS. Prerequisite: Geography 190. Mr. Eastman/Offered every year

294 SEMINAR IN CARTOGRAPHY/SEMINAR

Examines philosophical and practical concerns in both historical and contemporary mapping. Involves project work. Content changes from year to year. Permission of instructor required. Mr. Steward/Offered periodically

298 FIELD SAMPLING METHODS/LECTURE, LABORATORY

Provides field training with Global Positioning System (GPS) receivers, and integrates the three techniques of GPS, GIS, and image analysis through local field exercises. Provides and overview of sampling methods in order to complete a GIS database development and mapping exercise. Prerequisites: Geography 190 and one of the following: 292, 297, and 397 or permission of the instructor. Mr. Eugenio Marcano/Offered every year

300 ADVANCED TOPICS IN PHYSICAL GEOGRAPHY/SEMINAR

Graduate-level examination of theories and concepts of physical geography. Focuses on research interests of the faculty and students taking the course. Prerequisite: permission of instructor. Mr. Lewis/Offered periodically

302 THE EMPIRE OF GLOBALIZATION

This class will explore the "Empire" of globalization through a detailed examination of Michael Hardt and Toni Negri's bold new book, "Empire" (Harvard University Press, 2001). Imperialism, as we knew it, may be no more, but Empire is alive and well. Hardt & Negri contend that the contemporary economic, cultural, and legal transformations taking place across the globe is an order fundamentally different from the European dominance of the previous era. Rather, today's Empire draws

on elements of U.S. constitutionalism, with its foundation in hybrid identities and expanding frontiers. "Empire" explores the radical shift in concepts that form the basis of modern politics, such as sovereignty, nation, and people. Hardt & Negri link this philosophical transformation to cultural and economic changes in "post-modern" society - new forms of racism, identity and difference, terrorism, migration, communication, and control. "Empire" is also a work of utopianism, looking beyond the regimes of exploitation and control that characterize today's world order, seeking an alternative political paradigm and basis for a truly democratic global society. Mr. Merrifield/ Offered every year

304 SEMINAR ON WATERSHED ECOLOGY/SEMINAR

Examines current scientific literature on the functional ecology and biogeochemistry of contrasting terrestrial ecosystems. Includes inputs, outputs, and internal transfers of water and nutrients in temperate hardwood forests, pine barrens, tropical rainforests, montane cloud forests, eucalypt woodlands, and arid environments. Emphasizes processes of rock weathering, leaching from above-ground vegetative surfaces, nutrient uptake by plants, atmospheric inputs, and stream discharge of nutrients. Mr. Herwitz/Offered every other year

314 RESEARCH DESIGN, RESEARCH METHODS/SEMINAR

Covers major topics in empirical social research design and methodology, including problem definition, research strategies, measurement, sampling, data collection techniques and procedures, and proposal writing. Mr. Mitchell/Offered every year

318 EXPLANATION IN GEOGRAPHY/SEMINAR

Explores several main types of explanation including positivist, existentialist, Marxist, feminist, and postmodernist. Focuses on tensions between structural and nonstructural explanation and the integration of theory and empirical facts. Meets first-year core course requirement for geography graduate students. Mr. Peet/Offered every year

330 SEMINAR IN CULTURAL AND POLITICAL ECOLOGY/SEMINAR

"Ecological transition," the increasing incorporation of nature into human culture, is the point of departure for an examination of the theory, method, and policy relevance of cultural ecology. Mr. Johnson, Mr. Turner/Offered periodically

335 FEMINIST GEOGRAPHY/SEMINAR

Explores the intersection of feminism and geography. Topics include feminist theory, epistemological questions in feminist geography, social movements, welfare politics and the state, and work. Ms. Hanson/Offered every other year

342 SEMINAR IN LAND-USE/COVER CHANGE IN GLOBAL CHANGE SCIENCE/SEMINAR

Examines land-use/cover change as the foundation for global change, environmental change, and sustainability science, and as the "human-environment" geographic subfields of these sciences. Topics addressed: international agendas, use-cover change globally and regionally, proximate and distal causes of change, theories of change, and spatially explicit modeling of change. Mr. Turner/Offered periodically

343 SEMINAR IN HUMAN DIMENSIONS OF GLOBAL CHANGE: IMPACTS AND SOCIETAL RESPONSES/SEMINAR

Explores societal responses to global environmental change. Addresses impact analysis, adaptation vs. adjustment, surprise, vulnerability analysis, policy analysis, social learning, precautionary strategies, and international institutions and regimes. Mr. Kasperson/Offered every other year

349 ADVANCED TOPICS IN SPATIAL ANALYSIS/SEMINAR

See IDCE 349. Mr. Ratick/Offered every semester

351 SEMINAR IN RESOURCE GEOGRAPHY: THEORY AND METHOD/SEMINAR

Examines theories and methods of resource estimation, allocation, and management, providing coverage of the scholarly literature of the field. Ms. Emel/Offered every other year

353 INTERNATIONAL POLITICAL ECOLOGY/LECTURE, DISCUSSION

Integrates theory and practice from cultural ecology, political economy, and ecological science, from local to global scale, based on readings and papers in social theory (feminist, structuralist, poststructuralist), policy, social/environmental movements, ecological paradigms, environmental management, sustainable development, and conservation.

Reading, writing, and discussion combines theory and case studies ranging from rural, agrarian cases to urban, industrial contexts.

Ms. Rocheleau/Offered every other year

355 SOCIAL FORESTRY, AGRECOLOGY, AND DEVELOPMENT/SEMINAR

Considers importance of trees and forests to social and ecological well-being of people, emphasizing interests of rural people in Africa, Asia, and Latin America. Examines forest resources as a growing focus of political and economic action at local, national, and international levels. Concentrates on case-study examples of technical and policy innovations in social forestry and agroforestry.

Mr. Rocheleau/Offered every other year

362 SEMINAR ON GLOBALIZATION

Examines contemporary literature on global economic change. Both theoretical and empirical literature on governance, interdependence, labor, and networks will be analyzed. Discussions intended to generate geographic paradigms to better understand the relationship between the global and the local.

Ms. Aoyama/Offered every other year

365 GRADUATE SEMINAR IN ECONOMIC GEOGRAPHY

Reviews historical and contemporary debates in economic geography. Emphasis is placed on understanding conceptual frameworks and main assumptions of a variety of pertinent theories, including that of industrial location, regional development, industrial organization, and technological innovation. Empirical studies that incorporate evolutionary and institutional paradigms will also be examined.

Ms. Aoyama/Offered every year

368 SEMINAR: THE DEVELOPMENT OF WESTERN GEOGRAPHIC THOUGHT/DISCUSSION

Examines principal orientations, themes, and debates within emergent professional geography communities in the 19th and 20th centuries and the professional structure of the field in research, educational, and applied contexts. Primarily for entering graduate students into geography. Mr. Turner/Offered every year

370 ANIMAL AGRICULTURE/LECTURE, DISCUSSION

Animals and humans have a long history of close association, and humans rely on animals for food, fiber, labor, and companionship.

Animals play an important role in efforts to increase food production and to improve diet quality in support of a growing human population. Examines terrestrial and aquatic animal systems, and the theory and practice of their intensified exploitation. Mr. Johnson/Offered every other year

389 RESEARCH THEMES IN GIS/LECTURE, DISCUSSION

Traces recent GIS history to identify major research themes. Primarily an exploration of research literature to prepare for Ph.D. oral examination in GIS. Prerequisite: permission of instructor. Mr. Eastman/Offered every year

393 GIS AND INTERNATIONAL DEVELOPMENT/SEMINAR

Required for M.A. in GIS and International Development. The Fall seminar is open to all students interested in GIS for international development. The Spring session is restricted to GIS/ID M.A. students and focuses on the research project. The two summer sessions are dedicated to project completion and presentation. Mr. Pontius/Offered every semester

396 SEMINAR IN THE MAPPING SCIENCES/SEMINAR

Reconsiders the fundamental assumptions and actions underlying the mapping sciences in the light of recent/significant technological developments. Examines purposes behind mapping and the interlinking demands of data, design, structures, scale, generalization, aesthetics, information, and communication. Permission of instructor required. Mr. Steward/Offered periodically

397 ADVANCED TOPICS GIS/LECTURE, LABORATORY

Covers major research and application issues in GIS. Topics include geodesy, projections, change and time series analysis, error sources, assessment and propagation, analysis under conditions of uncertainty, and multi-criteria and multi-objective decision making.

Prerequisite: Geography 190 and permission of instructor. Mr. Eastman/Offered every year

GOVERNMENT AND INTERNATIONAL RELATIONS

Department Faculty

Mark C. Miller, J.D., Ph.D., *chair: American government, politics of law and the judiciary, Congressional politics, lawyers and politics*

John C. Blydenburgh, Ph.D.: *elections, polling, U.S. national politics, political psychology*

Brian J. Cook, Ph.D.: *U.S. public policy, public administration, environmental politics, bureaucratic politics*

Cynthia H. Enloe, Ph.D.: *women and politics, militarization, Asian politics, British politics, ethnic and racial politics*

Beverly C. Grier, Ph.D.: *African politics, international development, women's studies, U.S. black politics*

Sharon Perlman Krefetz, Ph.D.: *U.S. urban politics, suburban politics, housing policies, women and politics*

Valerie Sperling, Ph.D.: *post-Soviet and East European politics, comparative politics, social movements and collective action, women's studies*

Kristen Williams, Ph.D.: *international relations theory, arms control and international security, nationalism and ethnic politics, U.S. foreign policy*

Adjunct Faculty

Douglas J. Little, Ph.D.

Robert J.S. Ross, Ph.D.

Visiting Faculty

Daniel Klinghard, M.A.: *U.S. social movements and interest groups, U.S. campaigns and elections, political theory*

George M. Lane, M.A.: *U.S. foreign policy, Middle East politics*

Petros Vamvakas, Ph.D.: *comparative politics, political development and change, state formation, conflict resolution, politics in the Balkans and Eastern Europe*

Undergraduate Program

The department explores some of the most important political questions that face people of all countries. Why are some governments effective and others not? What causes wars or solidifies peace? Can public policies affect relations between women and men, and between different racial groups? Most important, who decides such questions and how? The department offers courses that address these questions and others—in international relations, in American politics, and in comparative politics. The curriculum provides theories and concepts, relevant information, and tools for investigation for students to develop their own answers.

Major Requirements

The major provides a general introduction to the study of politics, and an opportunity to explore one particular subfield in greater depth, allowing students to concentrate in one area of politics. The three subfields are: American politics and public policy; comparative politics; and international relations. Students must take 14 courses total, with leeway choosing particular courses. Most courses are in the Government Department, but the few from other disciplines complement the study of politics and explore the relationships between government and other sectors of society. The 14 required courses—11 in government, one in economics, one in history, and one other from related disciplines—are divided into two categories.

General government requirements: seven courses, including one subfield introductory course (in addition to the introductory course in one's chosen subfield); the economics course, Econ 10 A Comparative Approach; one government course in normative political theory (Gov 155, 203, or 206); one course in research methods and skills, Gov 107; and three government courses from outside one's chosen subfield.

Subfield specialization requirements: seven courses, including the introductory course to one's chosen government subfield (Introduction to American Government, Introduction to Comparative Politics, or Introduction to International Relations); four additional government courses in one's chosen subfield (one of these four must be in the form of a seminar in one's subfield, taken in the junior or senior year); and two courses, related to the subfield, from outside the Government Department. (A list of related courses is available from the department office; one must be in History. The other one should be chosen with one's advisor.)

Subfield Descriptions

American Politics

The American Politics and Public Policy subfield includes study of basic political and governmental institutions, major political processes, law, and important patterns of political behavior. Subfield specialists become familiar with each of these three broad areas, learning how the political system operates, why public policy emphasizes particular values and allocates certain resources to different groups and individuals, and who benefits and who loses in policy outcomes in policy areas such as housing, the environment, and the economy. The federal structure of American government and the diversity of the American population also require familiarity with state politics, urban and suburban politics, law and politics, African-American politics, and women and politics.

Comparative Politics

Comparative politics has two intertwined meanings at Clark: 1) it means immersion in the study of politics in two or more countries outside the U.S., and 2), it means deliberately comparing important factors, such as social movements, issues, or policy-making processes in two or more countries. Subfield specialists are given the chance to delve into politics experienced by elites and ordinary people inside other countries. While the U.S. is intentionally kept off center stage in comparative politics courses, most of them raise specific questions about American politics—its policies, experiences, and assumptions—as they are seen from the vantage point of people in countries such as South Africa, Mexico or Russia. The study of comparative politics alerts the specialist to the varieties but also the surprising similarities in how power is gained, and how it is justified and wielded in different countries.

International Relations

Government majors who specialize in international relations address global politics at two intersecting levels: 1) formal state-to-state behavior in terms of diplomacy, war and peace, intervention, law, and organization; and 2) translation of global interactions in terms of trade, development, social movements, refugees, human rights, ecology, and media. Subfield specialists engage in rigorous theoretical investigations of competing analytic traditions as they attempt to explain ongoing problems of world order. Some of these problems are local, such as boundary disputes; some are regional, such as regional economic integration; and some are global, such as poverty, the greenhouse effect, or militarization. Similarly, the actors in world politics are diverse: national governments, sub-national governments, international organizations, private interest groups, social classes, and religious movements.

Minor Requirements

The government minor requires a minimum of six courses within the department. One must be an introductory course (Govt 050, 069, or

070); one must be either in political theory (Govt 155, 203, or 206) or in research methods (Govt 107); and four others can be in any assortment of subfield areas (including two at the 200 level). An internship supervised by a Government faculty member, as well as approved political science courses taken as part of an accredited Study Abroad program, may count toward the minor.

Internships And Study Abroad

Internships in American local, state, and federal government agencies, in independent public interest groups, in private law firms, and in companies can earn students government major credit. Study abroad may also fulfill major requirements. To receive government major or minor credit, a student must work with his or her faculty advisor, or another faculty member in the department.

Honors In Government

Juniors with strong academic records may apply to the Honors Program which expands research and writing skills through an in-depth systematic analysis of one specific topic. Students can achieve honors by successfully completing the Honors Program, which involves researching, writing, and defending a senior thesis. Interested students should obtain guidelines in the department office and must submit applications by March 15 of the junior year.

Nonmajor Concentration

Certain fields of study can be taken as concentrations in addition to and complementary to the Government major. Some concentration requirements may also fulfill government major requirements. (See specific catalog sections on these concentrations.)

Student Handbook

The Government Department publishes a handbook, which has a more extensive description of major requirements, programs, courses, and faculty, as well as other information relevant to the major. Copies are available in the department office.

General Courses

- 102 First-year Seminar
- 107 Research Methods
- 155 Roots of Political Thought
- 202 Applications of Game Theory
- 203 Seminar: Political Theorists and Their Theories
- 206 Recent Political Theory
- 296 Senior Honors Thesis in Government and International Relations
- 298 Internship
- 299 Independent Study

American Politics And Public Policy

- 050 Introduction to American Government
- 154 The Politics of Public Policy in the U.S.
- 157 The Politics of Environmental Issues
- 170 American Political Thought and Behavior
- 171 Urban Politics: People, Power, and Conflict in U.S. Cities
- 172 Suburbia: People and Politics
- 175 Women and U.S. Politics
- 204 The American Presidency
- 205 Campaigns & Elections
- 209 The U.S. since 1968
- 213 Policy Analysis
- 215 State and Local Government and Politics
- 221 Seminar: Urban Policy Internship
- 223 Seminar: Suburban Policy Issues
- 224 African-American Politics in the U.S.
- 225 Seminar: African-American Women
- 248 The Politics of Mass Society
- 251 Social Movements and Interest Groups
- 252 Political Parties
- 253 Judicial Politics
- 255 The Politics of Congress
- 272 U.S. Constitutional Law: Civil Liberties
- 273 U.S. Constitutional Law: Governmental Powers
- 274 The Supreme Court in American Society

- 276 Environmental Law
- 281 Seminar: The Politics of Policy Implementation
- 282 Seminar: Housing Policies
- 291 Seminar: Lawyers and Politics
- 293 Seminar: Constitutional Democracy
- 297 Seminar: Advanced Topics in American Politics

Comparative Politics

- 070 Introduction to Comparative Politics
- 103 Africa and the World
- 110 Introduction to Women's Studies
- 117 Revolution and Political Violence
- 125 Tales from the Far Side
- 136 Sub-Saharan Africa: Issues and Problems
- 177 Transitions to Democracy
- 178 South Africa: History and Contemporary Politics
- 179 Comparative Foreign Policy
- 186 Upheaval in Eastern Europe
- 208 Comparative Politics of Women
- 210 Violence in the Middle East
- 212 Latin-American Politics
- 214 Mass Murder and Genocide under Communism
- 218 Seminar: Child Labor and the State: Comparative Perspective
- 219 Seminar: The Politics of Land: Kenya, Zimbabwe, and South Africa
- 228 Comparative Politics of Race, Ethnicity, and Gender
- 230 Armenian Genocide
- 232 Politics and Religion in the Balkans
- 256 Corruption, Crime and Chaos in Contemporary Russia
- 257 Comparative Courts and Laws
- 261 Seminar: Women and Militarization in a Comparative Politics Perspective
- 265 Politics of Women and Men in Japan
- 286 Seminar: Advanced Topics in Comparative Politics
- 293 Constitutional Democracy

International Relations

- 069 Introduction to International Relations
- 103 Africa and the World
- 147 World Order and Globalization
- 179 Comparative Foreign Policy
- 227 Global Politics of Development
- 238 U.S. Foreign Policy 1914
- 240 Human Rights and International Politics
- 242 Human Rights & Transitional Justice
- 245 Americans, Israelis & Arabs
- 246 The United States and the Persian Gulf
- 247 Seminar in Global Capitalism
- 250 U.S. National Security
- 280 Super Power Surrendering? Russia and the World
- 285 Seminar: Special Topics in Peace Studies
- 289 Seminar: Advanced Topics in International Relations

Courses

050 INTRODUCTION TO AMERICAN GOVERNMENT/LECTURE, DISCUSSION

Introduces the American governmental system. Overviews contemporary structure, operation and performance of national institutions. Addresses American political culture, voting and elections, the evolution of federalism, and important public issues, such as civil rights, civil liberties, and economic change. Mr. Cook, Mr. Miller/ Offered every year

069 INTRODUCTION TO INTERNATIONAL RELATIONS/LECTURE, DISCUSSION

Introduces basic concepts of international relations, e.g., the "balance of power," and broader alternative perspectives by which "security" can be viewed. Explores: the development of the nation's state system, World War I, World War II, the Cold War, the Post Cold War period and issues such as human rights, environment, gender, war and economics. Ms. Williams/Offered every year

070 INTRODUCTION TO COMPARATIVE POLITICS/LECTURE, DISCUSSION

Concentrates on two countries' politics each year: Britain and Mexico alternate with France and Canada. By looking at two countries in depth, the course explores political issues common to all countries, such as the role of the military, the relations between racial and ethnic groups, and how individual citizens become politically active. Ms. Enloe/Offered every year

102 THE GENDER GAP IN AMERICAN POLITICS/FIRST-YEAR SEMINAR

Since the early 1980s, the "Gender Gap" has received a good deal of attention from the media, politicians, and scholars. Differences between women and men in the general public have been found in voter turn-out, candidate, and party preferences, as well as in attitudes on a number of important domestic and foreign policy issues. On the other hand, women and men, overall, hold remarkably similar opinions on some political issues. A major focus of our course will be on comparing the political attitudes and behavior of women and men and understanding the factors that result in gender differences and similarities in politics, for example, differences in political and gender role socialization, education, employment, etc. We will also consider how different sub-groups of men and women compare to each other and to political patterns for their genders. The biggest gender gap in American politics continues to be at the elite level, where men still greatly outnumber women in running for and securing elective political offices. Another major focus of our course will be on explaining the reasons for this difference. We will consider the characteristics, backgrounds, and motivations of people—men and women—who run for local, state, and national elective offices, and the factors that affect their electoral success or failure, including party support, campaign funding, and media coverage. Finally, we will examine whether there are any important differences in the policy preferences, issue priorities, representational styles, and impact of female and

male elected officials. Fulfills the comparative perspective. Ms. Krefetz/Offered periodically

103 AFRICA AND THE WORLD/LECTURE, DISCUSSION

Examines the historical and contemporary relationships of sub-Saharan Africa and Europe, the United States, the Middle East, and parts of Asia, and Latin America. The course explores issues such as global involvement in Africa's civil wars, genocide in Rwanda, Islamic fundamentalism, the role of the World Bank and International Monetary Fund in Africa's development, and the impact of the HIV/AIDS pandemic. The role of the United Nations and nongovernmental organizations in development, conflict, and humanitarian concerns is also explored. Ms. Grier/Offered every other year

107 RESEARCH METHODS/LECTURE, DISCUSSION

Considers the logic of the research process: from formulating and stating testable hypotheses and operationalizing concepts to collecting and analyzing appropriate data. Explores both concepts and techniques, including statistical analysis. Students design research projects independently or in teams, and analyze data. Mr. Cook, Ms. Krefetz/ Offered every semester

110 INTRODUCTION TO WOMEN'S STUDIES/LECTURE, DISCUSSION

Provides a broad, global overview of women's studies, its questions, its findings, considering women's experiences and roles in different generations and socio-cultural communities. Ms. Enloe, Ms. Sperling/Offered every year

117 REVOLUTION AND POLITICAL VIOLENCE/LECTURE, DISCUSSION

Analyzes the concept, the causes, and the process of revolution. Is revolution inevitable? How does it differ from terrorism, guerrilla warfare or coups? This course examines the Russian and Chinese revolutions as 20th-century prototypes; comparisons are then drawn to more recent revolutions in Eastern Europe, the Middle East, Latin America and South Africa. Ms. Sperling/Offered every year

125 TALES FROM THE FAR SIDE/LECTURE, DISCUSSION

See International Development 125.

Ms. Asher/Offered every year

136 SUB-SAHARAN AFRICA: ISSUES AND PROBLEMS/LECTURE, DISCUSSION

Explores issues and problems confronting sub-Saharan Africa, including the legacy of colonialism, the establishment of nation-states, and the role of parties and the military in the politics of selected countries. Examines women's roles, class conflict, alternative development strategies, the environment, regional conflicts, and the global economy. Ms. Grier/Offered every other year

147 WORLD ORDER AND GLOBALIZATION/DISCUSSION

Explores the ways in which states have attempted to establish order in an anarchical international system. An overriding challenge to the existing world order, particularly in the post-Cold War period, comes from globalization (economic, political, social issues). Is globalization leading toward a single system of values, or fragmenting into incompatible pockets of pluralist identities? Ms. Williams/Offered every year

154 THE POLITICS OF PUBLIC POLICY IN THE U.S./LECTURE, DISCUSSION

Where do policy ideas originate? How do coalitions form in support or opposition to a policy? Do the dynamics of policy making and public action vary across issues? The focus is on understanding public policy development and implementation at the national level in the U.S., including why some policies fail to develop or why they fail to take effect as intended. The approach includes assessment of prominent theories of policy development, and in-depth analysis of cases. GOVT 050 strongly recommended as a prerequisite. Mr. Cook/Offered every other year.

155 ROOTS OF POLITICAL THOUGHT/LECTURE, DISCUSSION

Western political thought from the classic Greek period to early modern liberalism and socialism is analyzed through contributions by

major thinkers: Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau and Marx.

Staff/Offered every year

157 THE POLITICS OF ENVIRONMENTAL ISSUES/LECTURE, DISCUSSION

Why have environmental policies emerged or failed to emerge? What is distinctive about the politics of environmental issues? The primary focus is national environmental politics and policy making in the United States. Students explore in detail just a few prominent environmental issues, such as pesticides, air pollution, and natural resource conservation, to determine the character of policy action, public ideas, political leadership, and institutional development. Assignments emphasize class discussion, oral presentations, group simulations, and short written analyses. Govt 050 strongly recommended as a prerequisite. Mr. Cook/Offered every other year.

170 AMERICAN POLITICAL THOUGHT AND BEHAVIOR/LECTURE, DISCUSSION

Explores factors that have shaped a distinctive American political culture—our shared values, beliefs, attitudes, and expectations of government. Considers how this culture is transmitted through the process of political socialization, in which our political orientations and behavioral predispositions are formed. Examines how political culture and socialization are connected to contemporary political attitudes and behavior. Ms. Krefetz/Offered periodically

171 URBAN POLITICS: PEOPLE, POWER, AND CONFLICT IN U.S. CITIES/LECTURE, DISCUSSION

Focuses on the major socioeconomic and political forces that affect city politics in the U.S. Topics include: the growth and decline of the cities; fiscal constraints; federal and state urban policies; political machines; reforms; the "Post-Reform Era;" the community power debate; regimes and coalition building; and efforts by African-Americans and Latinos to gain political incorporation. Ms. Krefetz /Offered every year

172 SUBURBIA: PEOPLE AND POLITICS/LECTURE, DISCUSSION

Focuses on the causes and consequences of the rapid growth of suburbs in the U.S. after World

War II, impact on the nature of metropolitan areas. What are the characteristics of the people who live in suburbs? Is suburban homogeneity a myth or reality? How are suburbs governed? What is suburban political participation like? What are the patterns of policy making on issues such as education, zoning, and property taxes? Ms. Krefetz/Offered every other year

175 WOMEN AND U.S. POLITICS/LECTURE, DISCUSSION

Explores the political attitudes, behavior, and status of women in the U.S. Views on the nature of women and their "proper" role in society and the state, set forth by classical political philosophers in ancient times, are contrasted with ideas introduced by women's rights theorists, beginning in the 18th century. Focus is on contemporary U.S. politics, including: gender differences in political socialization and political participation, the "gender gap" in voting preferences, women as politicians and bureaucrats, and the influence of women on public policies. Ms. Krefetz/Offered every year

177 TRANSITIONS TO DEMOCRACY/LECTURE, DISCUSSION

How can a dictatorship become a democracy? What challenges face countries emerging from repressive rule? Using first-hand accounts, historical analyses and contemporary films, this course explores the role of grassroots movements, elites, and the international context in struggles to create and sustain democracy. The focus will be on transitions from totalitarian and authoritarian regimes in Europe and military dictatorships in Latin America. Ms. Sperling/Offered every other year

178 SOUTH AFRICA: HISTORY AND CONTEMPORARY POLITICS/LECTURE, DISCUSSION

Acquaints students with the forces that have shaped the political system of contemporary South Africa. Examines colonialism, apartheid, African nationalism and the anti-apartheid struggle, the role of African women, politics since the election of Mandela, South Africa's economic and political role in the southern Africa region, and Western involvement in the

country during apartheid and post-apartheid eras. Ms. Grier/Offered every other year

179 COMPARATIVE FOREIGN POLICY/LECTURE, DISCUSSION

Explores forces that influence the formulation and execution of foreign policy. Is it international setting or domestic factors which determine foreign policy? What are options and constraints in devising a foreign policy in the post-cold war era? Explores the foreign policy-making process in various countries, including Europe and Eurasia. Staff/Offered periodically

186 UPHEAVAL IN EASTERN EUROPE/LECTURE, DISCUSSION

Within a dramatic and short space of time, Eastern Europe was transformed from a homogenized communist bloc to a region brimming with diversity, complexity, and unfulfilled potential. The course examines the transformations ranging from Stalinism to pluralism. Why did the revolutions of 1989 occur? What are the difficulties in transition to market economies and democracy? Ms. Sperling/Offered periodically

202 APPLICATIONS OF GAME THEORY/LECTURE, DISCUSSION

Game theory was invented by Jon Von Neuman in the 1920s as a language and a logic for analyzing and resolving human conflict. This course presents applications and illustrations to international relations, war, political campaigning, and many real-life situations. Students use bargaining, threats, commitments, mediators, ignorance, and power in resolving conflict. Mr. Blydenburgh/Offered every other year

203 POLITICAL THEORISTS AND THEIR THEORIES/SEMINAR

Focuses on one or two people whose theories have influenced ideas about power, governing, liberty, equality, and justice. Explores their lives and the societies and events that shaped their ideas. Theorists who have been featured include Hannah Arendt, Alexis de Tocqueville, Erich Fromm and Karl Marx. Staff/Offered periodically

204 THE AMERICAN PRESIDENCY/LECTURE, DISCUSSION

Examines the president's changing role in American politics, evolution of the modern presidency, selection and nomination process, relationships with other political institutions, and presidential character. Explores proposed reforms for the future. Prerequisite: GOVT 050 or permission of instructor. Mr. Cook/Offered every other year

205 CAMPAIGNS AND ELECTIONS/LECTURE, DISCUSSION

Examines election and campaigns from a number of different perspectives: the theoretical underpinnings of American elections, their historical development, the rules by which campaigns are governed, and the strategies that candidates follow in pursuit of office. Although the focus is almost exclusively on national (presidential and congressional) elections, it is the goal of the course to examine the process of elections from a standpoint that will enable students to understand and analyze the electoral process at various levels of government. The primary system, the role of the media, and the issue of campaign finance, among other topics, are also explored. Staff/Offered periodically

206 RECENT POLITICAL THEORY/LECTURE, DISCUSSION

Examines a central normative category of modern democracy from a number of different perspectives: historical development of a distinctly modern public sphere, the liberal and civic republican accounts of the public sphere, and feminist and postmodern critiques. Staff/Offered every year

208 COMPARATIVE POLITICS OF WOMEN/LECTURE, DISCUSSION

Explores the roles, priorities, strategies, and theories of women in the politics of industrialized and developing countries. Causes for changes or lack of genuine changes in women's political influence are investigated to shed new light on those countries' political systems. Discusses the politics of democratization, sexuality, labor, and cross-race alliances. One or

more previous courses in government or in women's studies is strongly advised.

Ms. Enloe/Offered every other year

209 AMERICA IN OUR TIME: THE U.S. SINCE 1968/LECTURE, DISCUSSION

See History 209. Mr. Little/Offered periodically

210 VIOLENCE: THE CASE OF THE MIDDLE EAST/LECTURE

Religious affiliation and the infusion of its absolutist perspectives with the tenets of the nation-state have created societies in the Middle East away from the secularized and inclusive models creating increasing possibilities of extreme participation. Studying these issues within the Middle East allows us the additional benefit of current events, but it will provide a window to other areas and levels of politics where violence is equally prevalent. Staff/Offered periodically

212 LATIN AMERICAN POLITICS/LECTURE, DISCUSSION

Provides an introduction and an overview of the key economic and political issues confronting Latin America today: economic development and social inequality, international debt, the breakdown of democracies as well as transitions from authoritarian rule, revolutions, and the role of working-class, women's, peasant, and ethnic movement. Draws on the analytical perspectives of the political economy and cultural politics to develop a nuanced and self-reflexive understanding of the complex realities of Latin-American politics.

Ms. Asher/Offered periodically

213 POLICY ANALYSIS/LECTURE, DISCUSSION

How can society better determine what public problems exist? What policies will respond best to those problems? What impacts have public policies had? These are the questions that animate the policy analysis enterprise, which aims to improve public decision making. Introduces the structure, methods, and subject matter of the field, helps students sharpen their analytic skills, and explores several important public policy issues. Students present and discuss concepts and methods and engage in an

intense analysis simulation. Prerequisite: Govt 107 or other social science methods course, or permission of instructor. Limited to juniors and seniors. Mr. Cook/Offered every other year

214 MASS MURDER AND GENOCIDE UNDER COMMUNISM/LECTURE, DISCUSSION

Is communism inherently genocidal? Do communism and mass murder necessarily go hand in hand? This course explores the origins, motivations, and consequences of the brutal and deadly policies adopted in three very different communist regimes (the Soviet Union, China and Cambodia). We will also consider whether the legacies of communist rule made possible or encouraged Yugoslavia's lethal disintegration. Ms. Sperling/Offered every other year

215 STATE AND LOCAL GOVERNMENT AND POLITICS/LECTURE, DISCUSSION

Overviews the operation of state and local governments, explaining distinctive features of states in terms of their individual political, economic, historical, legal, and demographic characteristics. Focuses on how these features explain state political systems in the present and how they are likely to shape the states of the future. Focuses on Massachusetts and other Northeastern states. Prerequisite: Govt 050. Staff/Offered periodically

218 CHILD LABOR GLOBALIZATION/SEMINAR

This course raises and attempts to answer a number of questions. Is globalization good or bad for child labor? Or is the record mixed? Taking a comparative perspective, the course looks at different forms of child labor in a number of developing countries, from carpet weaving in Iran, prostitution in the Philippines, and child soldiering in Liberia to factory work in Mexico and to plantation agriculture in Brazil and South Africa. It seeks to determine the impact of global trade, new communications and information technologies, World Bank and International Monetary Fund policies, and the rise of nonstate actors on child labor and explore the role of states in an increasingly globalized political economy. Ms. Grier/Offered every year.

219 POLITICS AND DEVELOPMENT IN SOUTHERN AFRICA/SEMINAR

Explores in a comparative way various issues in the politics and development of the Southern Africa region: race, class, gender, ethnicity, democratization, land reform, labor migration, the HIV/AIDS pandemic, the environment, child labor, the World Bank, and the role and effectiveness of the Southern African Development Community. The countries covered include: South Africa, Lesotho, Swaziland, Botswana, Namibia, Zimbabwe, and Mozambique. Ms. Grier/Offered every year

221 URBAN POLICY/SEMINAR AND INTERNSHIP

Focuses on how cities make and implement policies and deliver services, exploring especially downtown redevelopment, neighborhood revitalization, and housing policies. Students intern at a Worcester redevelopment, housing or other policy-making organization. Students discuss course readings and share experiences, combining perspectives of scholars and practitioners. Government 220 or permission of the instructor is required. Limited to twelve students, with preference given to juniors and seniors. Ms. Krefetz/Offered every other year

223 SUBURBAN POLICY ISSUES/SEMINAR

Explores politics and policy making in suburban communities, especially zoning and land use, education, and property taxes. Students conduct original research in suburbs of Worcester and Boston. Prerequisite: GOVT 172 or permission of instructor. Ms. Krefetz/Offered periodically

224 AFRICAN-AMERICAN POLITICS/LECTURE, DISCUSSION

Explores the relationship between African Americans and the U.S. political system, emphasizing responses of executive, legislative and judicial branches, major political parties, and mass media to the African American question for equality. Examines the impact of the Congressional Black Caucus, big city mayors, and debates over affirmative action, crime, and welfare. Ms. Grier/Offered every other year

225 AFRICAN-AMERICAN WOMEN/SEMINAR

Examines historical experiences of African-American women from the period of slavery to the present. Examines their roles in economy and politics, resistance to racial and sexual oppression, and historical relationship to white women's movements. Comparisons are made between black women's experiences in the U.S., the Caribbean, and South Africa.

Ms. Grier/Offered every other year

227 GLOBAL POLITICS OF DEVELOPMENT/LECTURE, DISCUSSION

Expands the boundaries of "development" studies beyond "local" or "national" level phenomenon, to explore a key dimension of contemporary world politics. Extends the basic historical political economy framework developed in GOVT 145, to deal in greater depth with the ideas, interests and institutions that comprise the international development "regime."

Staff/Offered periodically

228 COMPARATIVE POLITICS OF RACE, ETHNICITY, AND GENDER/LECTURE, DISCUSSION

Explores politics of "ethnicity" and "race" for groups as different as Asian Americans, black Britons, Latin American Indians, Bosnians, and others. Investigates government policies and popular movements. Explores the political implications of ideas about "masculinity" and "femininity" for race, ethnicity, and state power. Previous study of international development, comparative politics, history, sociology, or women's studies recommended. Ms. Enloe/Offered every other year

230 THE ARMENIAN GENOCIDE/LECTURE, DISCUSSION

Examines the various dimensions of the Armenian Genocide, through scholarly analyses, survivor narratives, journalistic accounts, and other sources. Through the course, students develop a detailed understanding of the actual events of the genocide, its social and political causes, and its immediate and long-term impact on individual Armenians and the Armenian nation generally. Students will also treat in-depth the initial external response to the genocide, its political and legal aftermath,

and the significant effort still made by the Turkish successor state to deny that the genocide occurred. Mr. Payaslian/Offered periodically

232 RELIGION AND POLITICS OF THE BALKANS/LECTURE, DISCUSSION

Examines the political development of the Balkans as a region and specifically looks at three distinct transitions toward liberal democracy in the post-Soviet era in the countries of Greece, Yugoslavia, and Turkey. Because religion has played a key political role in the region, the course will also examine the area's distinct religious, cultural and ethno-national identity formations arising during the 19th and 20th centuries when the region was part of the Ottoman Empire. Mr. Vamvakas/Offered periodically

238 U.S. FOREIGN RELATIONS 1914/LECTURE, DISCUSSION

See History 238. Mr. Little/Offered every year

240 HUMAN RIGHTS AND INTERNATIONAL POLITICS/LECTURE, DISCUSSION

In recent years, questions of human rights and humanitarian concerns have been central to debates on such varied issues as U. S. and China relations, NATO's role in the former Yugoslavia, and the UN's place in the international system. The more general question of whether foreign policy should be based strictly on national interests or also include moral considerations has been long-standing, but it is particularly relevant in a post-Cold War world where national interests and priorities are less clear. Appeals to students interested in learning more about current policy disputes and in further exploring the impact of ideas in international politics. Staff/Offered periodically

245 AMERICANS, ISRAELIS AND ARABS/LECTURE, DISCUSSION

Studies U.S. foreign policy and diplomacy towards Israel and the Arab countries of the Eastern Mediterranean, including the Arab-Israeli peace process. After a brief introductory section, the course focuses on events in the region since the end of World War II. Mr. Lane/Offered periodically

246 THE UNITED STATES AND THE PERSIAN GULF/LECTURE, DISCUSSION

After a brief introductory section on the history and geography of the region, and U.S. interests in the area, this course will focus on U.S. relations with Iran, Iraq, and the Arabian peninsula since the end of World War II. Topics to be discussed include the U.S. role in the development of Middle Eastern oil, particularly in Saudi Arabia; the collapse of the Shah and the crisis in our relations with Iran; and "Desert Shield," "Desert Storm," and U.S. efforts to get rid of Saddam Hussein. The goal is to give the students an understanding of what happened, and why. Mr. Lane/Offered periodically

248 THE POLITICS OF MASS SOCIETY

Are there elements of a modal individual psychology that shape a political system? How are the dynamics of individual psychology manifested in mass behavior? What are the connections between political ideas and political psychology? This seminar addresses these questions by taking a broad view of American political and social culture. Mr. Blydenburgh/Offered every other year

250 U.S. NATIONAL SECURITY/LECTURE, DISCUSSION

Explores domestic and international politics of American national security policy, including the use of force, arms control, and diplomacy. Examines the historical background and principal policy-making institutions in security policy particularly the decision between civilians and the military. Case studies focus on the Vietnam War, the Persian Gulf War, and Bosnia. Prerequisites: Gov 069. Ms. Williams/Offered every other year

251 SOCIAL MOVEMENTS AND INTEREST GROUPS/LECTURE, DISCUSSION

Examines the strategies of social movements and interest groups for mobilizing resources and lobbying the state. Considers theoretical frameworks used to study mobilization and action, including the pluralist, power elite, and "cycle" theories for interest groups, and collec-

tive action, resource mobilization, and political process models of social movements. Staff/Offered periodically

252 POLITICAL PARTIES/LECTURE, DISCUSSION

Examines historical development of the party system in the U.S. and the structures and activities of the two major parties. Examines historical successes and failures of various types of third parties and comparative analysis with parties in other advanced democracies. Prerequisite: Govt 050 or permission of instructor. Mr. Cook/Offered periodically

253 JUDICIAL POLITICS/LECTURE, DISCUSSION

Explores the relationships between the courts and other sectors of the American political system. Studies how judges are selected, how courts handle civil and criminal cases, judicial policy making, and how interest groups use the courts. Mr. Miller/Offered every other year

255 THE POLITICS OF CONGRESS/LECTURE, DISCUSSION

Examines contemporary politics of the U.S. Congress from individual and institutional perspectives. Includes Congressional elections, differing views of representation, House-Senate differences, Congressional policy making, relationships between Congress and the courts, the presidency, the bureaucracy and interest groups, and the future of the institution. Mr. Miller/Offered every other year

256 CORRUPTION, CRIME AND CHAOS IN CONTEMPORARY RUSSIA

Explores Russia's current challenges, including the difficulty of changing a communist party-run dictatorship into a democracy, transforming a socialist economy into a capitalist one, and handling the rise of nationalism and separatism within its own borders. Coverage of the Soviet Union, from its creation in 1917 to its collapse in 1991, is included. Ms. Sperling/Offered every other year

257 COMPARATIVE COURTS AND LAW/LECTURE, DISCUSSION

Examines the court systems, the legal systems, and the role of the legal profession in various North American and Western European coun-

tries, including Canada, the U.S., the U.K., France, and Germany. Comparisons include the concepts of judicial review, constitutionalism, and the role of the courts in the broader governmental system. The course will also explore how the European Union and the Canadian Supreme Court will integrate the legal system from both the Common Law and Civil Law legal traditions. Mr. Miller/Offered every other year

261 WOMEN AND MILITARIZATION IN A COMPARATIVE POLITICS PERSPECTIVE/SEMINAR

Explores the possibility that any country's military grows in influence when popular ideas about "masculinity" and "femininity" link manhood with soldiering and "real womanhood" with supporting soldiers. What do women's own experiences in wartime and peacetime reveal about military politics? What do we learn about militaries when we look at governments' attempts to use women as mothers, wives, workers, or prostitutes? Do racial and economic differences shape women's experiences in war zones? Discusses Britain, South Korea, Argentina, the Philippines, and the U.S. Previous government or women's studies courses are desirable. Limited to juniors, seniors, and graduate students. Ms. Enloe/Offered every other year

265 POLITICS OF WOMEN AND MEN IN JAPAN/LECTURE, DISCUSSION

Japan is considered one of the world's powers, yet its domestic political dynamics are not widely understood by Americans. This course explores the major factors that have shaped Japanese politics and government policies since 1945. Analyzes: factional rivalries within major parties; the influence of bureaucrats; and the role of women, minorities, and business in politics. Open to majors and non-majors. Ms. Enloe/Offered every other year

272 U.S. CONSTITUTIONAL LAW: CIVIL LIBERTIES/LECTURE, DISCUSSION

Focuses on the historic and contemporary role of the U.S. Supreme Court in interpreting the

U.S. Constitution. Includes cases dealing with freedom of religion and speech, privacy, discrimination, and equal protection. Students may take GOVT 272 and 273 in any order. Replaces 254/HIST 239. Mr. Miller/Offered every other year

273 U.S. CONSTITUTIONAL LAW: GOVERNMENTAL POWERS/LECTURE, DISCUSSION

Focuses on the historic and contemporary role of the U.S. Supreme Court in interpreting the U.S. Constitution. Includes cases dealing with powers of Congress and the President, federalism, and economic rights. Students may take GOVT 272 and 273 in any order. Replaces 254/ HIST 239. Mr. Miller/Offered every other year

274 THE SUPREME COURT IN AMERICAN SOCIETY/LECTURE, DISCUSSION

Examines various aspects of the role that the Supreme Court of the United States plays in our system of government and in our broader social order. Examines various topics, such as the role of the Court in producing social change, the jurisprudence of individual justices, and recent trends in the Court's decisions on federalism, administrative law, and statutory interpretation. Also explores the aftermath of the Court's decision in *Bush v. Gore*. Mr. Miller/Offered periodically

276 ENVIRONMENTAL LAW/LECTURE, DISCUSSION
See ES&P 276. Staff/Offered every other year

280 SUPERPOWER SURRENDERING? RUSSIA AND THE WORLD/LECTURE, DISCUSSION

Studies Soviet foreign policy from the country's uncertain beginnings as the first Marxist state—to its dominant position as a superpower and its recent dissolution and collapse. Considers problems, goals, and trends of successive phases of Soviet foreign policy. Examines efforts of successor states, especially Russia and the Ukraine, to devise viable foreign policy strategies in the aftermath of the disintegration of the U.S.S.R. Ms. Sperling/Offered every other year

**281 THE POLITICS OF POLICY
IMPLEMENTATION/SEMINAR**

Explores, in depth, the philosophical, legal, political, and organizational challenges of implementing public policy and enforcing public law. Focuses specifically on the political and managerial challenges administrative agencies face. Students confront implementation dilemmas through case studies and research on agencies and policies. Prerequisite: Govt 154 or permission of instructor. Mr. Cook/Offered every other year

**282 HOUSING AND COMMUNITY
DEVELOPMENT/SEMINAR**

Focuses on social, economic, and political factors that shape the federal government's housing and community development policies and their implementation by local governments in metropolitan areas of the U.S. Explores: the myths and realities of public housing; urban renewal; gentrification; linkage; homelessness; redlining; exclusionary zoning; and racial and gender discrimination in housing. Ms. Krefetz/Offered every other year

285 SPECIAL TOPICS IN PEACE STUDIES/SEMINAR

See Peace Studies 285. Staff/Offered periodically

**286 ADVANCED TOPICS IN COMPARATIVE
POLITICS/SEMINAR**

Focus changes each year depending on faculty interest. Has focused on "International Feminist Thinking" and "Politics of Nationalism." Open to juniors and seniors and graduate students. Can be taken twice. Ms. Enloe, Ms. Grier, Ms. Sperling/Offered every year

288 GLOBAL CAPITALISM/SEMINAR

See Sociology 288. Mr. Ross/Offered periodically

**289 ADVANCED TOPICS IN INTERNATIONAL
RELATIONS/SEMINAR**

Focuses on historical-theoretical approaches to, and problems in, global politics. Topic varies each year. Substantial (20-30 page) research

paper required. Generally restricted to junior and senior I.R. majors; others may be admitted with permission of the instructor. Ms. Williams, Mr. Little/Offered every year

291 LAWYERS AND POLITICS/SEMINAR

Examines the role played by lawyers in American politics. Topics include lawyers in private practice, lawyers in legislatures, lawyers as judges, lawyers as lobbyists, government agency lawyers, and academic lawyers. Mr. Miller/Offered every other year

293 CONSTITUTIONAL DEMOCRACY/SEMINAR

Writing a constitution means creating a people. It is at once a very conservative and a very daring undertaking. It is also the most fundamental of political acts. What considerations are within the purview of the constitution maker? What consequences follow from founding choices? Through analyses of the constitutions and constitutional foundings of the United States, India, and South Africa, and through our own constitution writing effort, we will confront these questions, and the complexities of blending constitutionalism and democracy. Prerequisites: GOVT 050 and GOVT 155, or permission of instructor. Limited to juniors and seniors. Mr. Cook/Offered periodically

296 HONOR THESIS

**297 ADVANCED TOPICS IN AMERICAN
POLITICS/SEMINAR**

Focus changes with each offering, depending on faculty interest. A past topic was "Politics of Rich and Poor". Open to juniors and seniors. Staff/Offered periodically

298 INTERNSHIP

299 INDEPENDENT STUDY

HISTORY

Department Faculty

Janette Thomas Greenwood, Ph.D., chair: *American social history, African-American history, and history of the South*

Debórah Dwork, Ph.D.: *modern European history, history of the Holocaust*

Amy Froide, Ph.D.: *early modern Britain; European women; European social history*

Robert Gellately, Ph.D.: *modern German history, history of the Holocaust*

Douglas J. Little, Ph.D.: *U.S. diplomatic history, U.S. 20th-century history*

Drew R. McCoy, Ph.D.: *early American history, U.S. intellectual and political history*

Simon Payaslian, Ph.D.: *Armenian History, U.S. diplomatic history, British empire, Middle East*

Amy Richter, Ph.D.: *U.S. women's history, U.S. urban history*

Paul S. Ropp, Ph.D.: *Chinese social and intellectual history*

Visiting Faculty

Edward Kissi, Ph.D.: *International history of genocide, African history, U.S. diplomatic history, Southeast Asia*

Affiliate and Adjunct Faculty

John C. Brown, Ph.D.

Paul Burke Jr., Ph.D.

Richard B. Ford, Ph.D.

Everett Fox, Ph.D.

Beverly C. Grier, Ph.D.

George M. Lane, M.A.

Thomas P. Massey, Ph.D.

Diane Roazen, Ph.D.

Shelly Tenenbaum, Ph.D.

Emeriti

George A. Billias, Ph.D.

Daniel R. Borg, Ph.D.

Robert F. Campbell, Ph.D.

Paul Lucas, Ph.D.

Undergraduate Program

The History Department offers a traditional major, a minor, and elective courses for non-majors. Undergraduate majors must choose one of three areas of geographic specialization—United States, European, or Global History. These specializations may be linked to course work in interdisciplinary concentrations such as Asian Studies, Holocaust Studies, or Women's Studies.

The major exposes students to different fields of knowledge, offering training in critical thinking; the accumulation, organization, and analysis of information; and in clear and concise writing. The major provides an excellent background for graduate school, teaching; careers in law, government, journalism, international affairs, museum, library, and archival work, and business. With courses on every major geographical area of the world, and with conceptual approaches ranging from political and diplomatic to social, intellectual, and cultural, the History Department offers a rich and diverse curriculum.

The Department also participates in Clark's Higgins School of Humanities, allowing students to enjoy the support and benefits of the School.

Major Requirements

All history majors must take 10 history courses and two related non-history courses distributed as follows:

1. History 120 (Writing History), preferably before their junior year.
2. Five courses inside their geographic area of specialization. Of these five courses, at least three must be at the 200 level and at least one must be a seminar or a pro-seminar.
3. At least one course in each of the two geographic areas different from their own area of specialization. (For example, a student specializing in European history would need to take at least one U.S. and one global history course). At least one of these two courses must be at the 200 level.

- 4. At least one course, either inside or outside their area of specialization, devoted primarily to the period before 1800. An up-to-date list of courses that meet this requirement may be found in the History Department Handbook.
- 5. A capstone course during their senior year. This requirement may be fulfilled by writing an honors thesis, or (with the permission of the chair and instructor) by taking a research seminar or directed research course in the student's area of specialization. The capstone requirement cannot be met by any course used to meet conditions 1 through 4.
- 6. Two courses outside history in fields related to the student's area of specialization. These courses must be approved by the student's history adviser in advance and must be taken after the student has declared herself or himself to be a history major.

Majors select an advisor from the history faculty and they consult regularly, especially before registering each semester. The student and advisor design a coherent sequence of courses, and choose nonhistory courses that enhance the area of concentration. They also can make decisions about advanced research courses and enrollment in the departmental honors program.

The Honors Program

The honors program provides advanced courses for outstanding history majors, especially for aspiring professional historians. The program is appropriate for any career requiring resourcefulness and analytical and writing skills. Students must meet the general requirements for the major, choose a field of specialization, and earn four honors credits as part of, or in some cases in addition to, the 10 required history courses. Students enter the program by taking a prehonors seminar or proseminar. Admission into the honors program is contingent upon the completion of a prehonors seminar and upon evidence of outstanding work in other history courses. Building on the pre-

honors course, students write an extensive research thesis (two course credits) under the advisor's supervision. Seniors take a directed reading course (one course credit) related to their thesis topic. The program culminates with a written examination in the field of specialization and an oral defense of the student's thesis. The honors committee includes the student's thesis advisor and one other department member. If the committee finds the thesis or examination unsatisfactory, the student only receives ordinary history credit for the thesis and directed readings course.

The Prehonors Seminar Or Proseminar

To enroll in the honors program, students must take one of the department's seminars or proseminars that emphasize the development of research, analytical, and writing skills. A significant part of these courses is devoted to the writing and revising of research papers. Students should consult with their advisors or the department chair in selecting a course that satisfies the prehonors requirement. This course is normally taken during the junior year.

Undergraduate Minor

Students who wish to obtain an undergraduate minor in history must meet the following requirements: a minimum of six history courses, at least three at the 200 level, and no more than four in any one geographical area. At least one of the six courses must be a seminar or a proseminar.

Teacher Certification

Students may receive certification to teach high school history in Massachusetts and perhaps other states. Interested students should speak to the department chair.

Five-Year B.A./M.A. Program

The History Department participates in the University's five-year B.A./M.A. Program. Information about eligibility, application procedures, and M.A. requirements, is available in a separate brochure and from the department chair.

Graduate Program

The program focuses on two broad areas: American history and modern European history, with special emphasis on the history of the Holocaust. The department is affiliated with the American Antiquarian Society, which has one of the country's finest research libraries with more than 750,000 volumes and valuable manuscripts relating to pre-1876 American history. There are a dozen smaller libraries in Worcester with combined holdings of more than one million volumes and other research facilities in Boston, Providence, and New Haven.

Graduate course work includes reading seminars (colloquia), research seminars, and individual tutorials for both reading and research purposes. Graduate students may also register in upper-division undergraduate courses at a graduate level that requires more intensive work. First- and second-year students in the doctoral program take three courses each semester, one of which must be expressly devoted to the production of a research paper. Faculty advisors help incoming students design their programs, which may include courses in other departments or colleges in the Worcester Consortium.

Master of Arts

Students must complete six courses (for eight credits) and a one-year residence; either submit two substantial research papers prepared in two seminars, which are jointly equivalent to the master's thesis, or submit a master's thesis; and pass the required oral examination. (Residency requirements for part-time M.A. students are defined in terms of courses taken.)

Ph.D. candidates who have passed their preliminary examination (whether or not they will continue with a dissertation) may also receive the degree of master of arts.

Doctor of Philosophy

Enables students to master the discipline of history through research, reading, and teaching. In addition to meeting the 12-course requirements outlined above, a student who

enters without an M.A. degree usually spends at least two full-time years at Clark, must satisfy the language requirement, teach at the college level, pass the preliminary examination, and write a doctoral dissertation within seven years of matriculation. (Residency for part-time Ph.D. students is defined in terms of courses taken.)

Students concentrating in American history must pass an examination in one foreign language, normally French, German, Spanish, or Russian. Those specializing in European history must pass examinations in two foreign languages, normally French and German. An examiner in each language determines if the student is proficient enough to use the language as a research tool. All language requirements must be satisfied before the preliminary oral examination is scheduled.

At the end of the first year, there is a required one-hour oral exam based on the first year's course work whether or not students have an M.A.

Some teaching experience at the college level is desirable for the Ph.D. degree. Students normally meet this requirement in their second and third years as teaching assistants.

New students, with their advisors, devise an appropriate plan of preparation for their doctoral qualifying examination, which is normally taken before the end of their third year.

Examination details are in the History Department Graduate Program Handbook. The exam constitutes the "preliminary examination" required by the Graduate Board. Students who pass may, upon request, receive the master of arts.

Students are advised to consider dissertation topics during their years of residence and to choose a possible dissertation advisor as soon as possible. The process of writing a dissertation is outlined in Format Regulations for Theses, Dissertations, and Research Papers at Clark University, which may be obtained from the thesis format advisor in the Graduate School Office.

Courses

Undergraduate courses are either survey courses for first and second year students, numbered with two digits or 100-199, or advanced courses numbered 200-299. The latter carry no prerequisites (unless specifically noted), but generally carry a heavier workload than lower level courses. Some 300-level graduate courses are open to juniors and seniors with permission of the instructor. "Proseminars" have limited enrollment and combine reading, discussion, and written reports. "Seminars" are research courses.

History Course Listing by Fields of Specialization

Method and Theory

120 Writing History

U.S. History

- 011 Survey of U.S. History to 1865
- 012 Survey of U.S. History since 1865
- 016 Race and Ethnicity in American History
- 021 Voices from Slavery/First-Year Seminar
- 036 The Strange World of Thomas Jefferson/First-Year Seminar
- 037 19th-Century America through Women's Eyes/First-Year Seminar
- 111 Intro to Women's Studies
- 113 Urban Landscapes: The City in American History from Colonial to Modern Times
- 145 U.S. History through the Novel
- 201 Era of the American Revolution
- 202 The Early American Republic
- 203 Seminar in U.S. Urban History: Colonial—Modern Period
- 204 Interpretations of American History/Proseminar
- 209 America in our Time: The U.S. Since 1968
- 210 Research Seminar in Early American History
- 211 American Consumer Culture
- 213 Gender and the City in the U.S.
- 214 The American Civil War
- 215 The Age of Lincoln/Proseminar

- 216 American History in Comparative Perspective/Proseminar
- 217 Reconstruction: America After the Civil War, 1865-1877/Research Seminar
- 219 History of American Women
- 220 Community History/Research Seminar
- 221 From Slavery to Freedom
- 222 History of the South
- 223 The Civil Rights Movement
- 224 History of African-American Women/Seminar
- 231 America in the Gilded Age, 1877-1900/Proseminar
- 238 From World War to Cold War: U.S. Foreign Relations since 1939
- 239 U.S. Constitutional Law: Civil Liberties
- 240 U.S. Constitutional Law: Government Powers
- 243 American Antiquarian Society/Seminar in American Studies
- 245 Americans, Israelis & Arabs
- 246 The United States and the Persian Gulf
- 287 Advanced Topics in International Relations/Seminar

European History

- 070 Our European Roots: Western Civilization from the Ancient Hebrews through the Renaissance and Reformation
- 071 Our European Roots: Western Civilization from the 17th Century to the Present
- 074 The World and the West
- 100 Ancient Greece and Perseus/First-Year Seminar
- 110 Early Modern Europe
- 117 Introduction to Hebrew Bible: Narrative and Law
- 140 England to 1688
- 157 The Age of Nero
- 173 The History of Racial Thought in Modern Europe
- 174 The Jewish Experience
- 175 The History of the Holocaust to 1933
- 176 The Holocaust in Historical Perspective

- 229 Women in European History
- 230 Armenian Genocide
- 249 Women and Work in Pre-Industrial Europe
- 252 The British Empire
- 253 Europe in the Age of Extremes
- 256 Corruption, Crime and Chaos in Contemporary Russia
- 257 Jews & Christians in the Ancient World
- 258 Gender, Class, and Race in Modern Britain
- 259 War, Revolution and Society in Modern Germany
- 260 Rescue and Resistance during the Holocaust/Seminar
- 261 Jewish Children in Nazi-Occupied Europe/Seminar
- 262/362 Seminar: Science, Medicine, and Race in Modern Europe
- 263 Nazi Terror in German and Europe
- 264 Intimacy & Dictatorship/Seminar
- 265 Life and Death in the City: Occupied Europe, 1939-1945/Seminar
- 267 Religious Experience in the Ancient World
- 268 The Holocaust: Issues and Controversies/Seminar
- 270 Home Fronts in WWII/Seminar
- 273 Life Under Occupation/Seminar
- 274 The Fate of the Shtetl During the Holocaust/Seminar
- 276 Modern Jewish History and Thought
- 280 Superpower Surrendering? Russia and the World
- 284 The Holocaust and Its Aftermath: 1933-1996

Global History

- 033 Confucianism, Daoism, Buddhism: Cultural Heritage of China/First-Year Seminar
- 074 The World and the West
- 077 Introduction to Latin American Civilization
- 080 Introduction to Modern Asia
- 084 Japanese Civilization

- 103 Africa and the World
- 150 Jerusalem in History and Imagination
- 161 History of India
- 162 The History of the Modern Middle East
- 178 South Africa: History and Contemporary Politics
- 179 Africa to 1500
- 180 Africa since 1500
- 181 Chinese Civilization
- 182 Modern China
- 184 Modern Japan
- 233 Confucianism, Daoism, Buddhism: Intellectual History of China/Lecture, Discussion
- 275 20th Century Latin America/Proseminar
- 277 The History of Zionism in Israel/Seminar
- 279 Late Imperial China
- 281 The People's Republic of China
- 282 Chinese Women in Literature and Society
- 286 The Vietnam War
- 288 Seminar in Chinese History

Courses

011 SURVEY OF U.S. HISTORY TO 1865/LECTURE, DISCUSSION

A survey of American history from the earliest 17th-century settlements through the end of the Civil War. Introduces students to historical inquiry and stimulates creative inquiry into the origins and character of American civilization. Fulfills the historical perspective requirement. Mr. McCoy/Offered every year

012 SURVEY OF U.S. HISTORY 1865/LECTURE, DISCUSSION

Chronicles the rise of America to world power, focusing on key internal and foreign policy developments and conflict. Private and public life and the diversity of Americans' experiences are highlighted. Attention is given to general political, social, economic, and intellectual developments. Fulfills the historical perspective requirement. Ms. Richter, Ms. Greenwood/Offered every year

016 RACE AND ETHNICITY IN AMERICAN HISTORY/LECTURE, DISCUSSION

Explores the influence that racial and ethnic patterns have on American history from colonial times to the present. Largely through first-hand accounts, students will explore the experiences of various ethnic and racial groups in American history. Fulfills the historical perspective requirement. Ms. Greenwood/Offered every year

021 VOICES FROM SLAVERY/FIRST-YEAR SEMINAR

Explores the nature and dynamic of American slavery, largely from first-hand accounts of those who experienced and observed the slave regime of the American South in the 19th century. Designed to introduce students to the historical controversies concerning slavery and to expose students to the primary sources that historians use to understand slavery and the slave regimes. Fulfills the values perspective. Ms. Greenwood/Offered periodically

033 CONFUCIANISM, DAOISM, BUDDHISM: THE CULTURAL HERITAGE OF CHINA/FIRST-YEAR SEMINAR.

Explores the three major intellectual traditions of China—Confucianism, Daoism and Buddhism—with special attention to the influence of Confucian, Daoist and Buddhist values on China's cultural and artistic traditions. After reading some of the major early philosophical and religious writings in these three traditions, we will explore the profound impact of Confucian, Daoist and Buddhist values on Chinese culture, as seen especially in painting, sculpture, poetry and fiction. Fulfills the Aesthetic Perspective. Mr. Ropp/Offered every other year

036 THE STRANGE WORLD OF THOMAS JEFFERSON/FIRST-YEAR SEMINAR

Thomas Jefferson is one of the most familiar and increasingly controversial figures in American history. This seminar explores in depth two related subjects: Jefferson's life and career (with emphasis on the intersection of the public and the private), and the central place of Jefferson's reputation and image in

American culture from his time to ours. Students will read widely in recent scholarship on Jefferson as well as in primary sources. Fulfills the historical perspective requirement. Mr. McCoy/Offered periodically

037 19TH-CENTURY AMERICA THROUGH WOMEN'S EYES/FIRST-YEAR SEMINAR

Examines key developments of the 19th century—industrialization, slavery and Civil War, westward expansion, immigration, Progressive reform—as considered in the personal writings of individual women. Traces larger trends and identifies common experiences of women, while also paying attention to the differences and divisions among them. Designed to encourage a questioning of historical sources themselves. How reliable are first-person narratives? Are diaries and letters ever truly private? How can historians read personal documents and rebuild the past through them? Ms. Richter/Offered periodically

062 WAR AND PEACE IN THE MIDDLE EAST/FIRST-YEAR SEMINAR

Explores the cycle of war and peace in the Middle East during the past 100 years in order to answer three questions: What role has ethnic identity played in prolonging violent conflict in the region, not merely between Arabs and Israelis, but also between Shiite and Sunni Muslims? Have the United States, the Soviet Union, and the other great powers served more as peacemakers or troublemakers in the Middle East? To what degree is the contemporary confrontation between America and radical Islam "a clash of civilizations?" Case studies will range from the birth of Israel to the September 11th attacks and their aftermath. Students will write a series of brief essays based on historical and literary documents ranging from the Balfour Declaration to Osama bin Laden's fatwa against the United States. Fulfills historical perspective. First preference for enrollment will be given to students in the International Studies Stream. Others will be admitted on a space available basis. Mr. Little/Offered periodically

070 OUR EUROPEAN ROOTS: WESTERN CIVILIZATION FROM ANCIENT HEBREWS THROUGH THE RENAISSANCE AND REFORMATION/LECTURE, DISCUSSION

Outlines developments of Western society and our collective identity. Presents historical “angles”—cultural, religious, political, military, economic, and social—and integrates these analytical approaches into a coherent, popular narrative. The medieval period is emphasized as the root of modern history. Hist 70 and 71 are parts of a whole, but either course may be taken without the other. Fulfills the historical perspective requirement. Ms. Froide/Offered every other year

071 OUR EUROPEAN ROOTS: WESTERN CIVILIZATION FROM THE 17TH CENTURY TO THE PRESENT/LECTURE, DISCUSSION

Same goal as History 070. Covers the military revolution of the 16th century, the bureaucratic and scientific revolutions of the 17th century, the 18th-century Enlightenment, and the political, industrial, intellectual, and social revolutions of the 19th and 20th centuries. Hist 070 and 071 are parts of a whole, but either course may be taken without the other. Fulfills the historical perspective requirement. Staff/Offered every other year

074 THE WORLD AND THE WEST/LECTURE, DISCUSSION

Surveys European interaction with the non-white world from the 15th to the 20th century, including European engagement overseas. Focuses on social and cultural transformation of Europe as a result of “Expansion,” “Colonialism,” and “Imperialism.” Fulfills the historical perspective requirement. Staff/Offered periodically

077 INTRODUCTION TO LATIN AMERICAN CIVILIZATION/LECTURE, DISCUSSION

Seeks to introduce the diversity and complexity of the many Latin American nations and peoples, as well as to emphasize the historic, current and future importance of Latin America to the world. Special emphasis on ancient American civilizations, 16th century European contact and conquests, society then

and now (human rights, poverty, slavery, the many faces of race and identity), political instability, power of the military and foreign intervention. Ms. Roazen/Offered every year

080 INTRODUCTION TO MODERN ASIA/LECTURE

Surveys modern historical trends in India, China, Japan, Southeast Asia, and Korea. Through political biographies, literary selections, and general histories, the course compares native traditions, colonial experiences, and postcolonial developments in Asia since roughly 1800. Fulfills the historical perspective requirement. Mr. Ropp/Offered every other year

084 JAPANESE CIVILIZATION/LECTURE, DISCUSSION

Selected themes in contemporary and historical Japan. Fulfills the historical perspective requirement. Staff/Offered periodically

103 AFRICA AND THE WORLD/LECTURE, DISCUSSION

See Government 103. Ms. Grier/Offered every year

110 EARLY MODERN EUROPE/LECTURE, DISCUSSION

An introduction to the history of Europe between 1400 and 1800. Examines the primary social, economic, religious, political, and cultural events of the period; as well as gain an understanding of the important changes that occurred in the early modern era. Explores the colonization of the Americas, the advent of the new economic system called capitalism, and the role of Europeans in the Atlantic slave trade. Ms. Froide/Offered every year

111 INTRODUCTION TO WOMEN'S STUDIES/LECTURE, DISCUSSION

See WS 110. Ms. Richter/Offered periodically

113 URBAN LANDSCAPES: THE CITY IN AMERICAN HISTORY FROM COLONIAL TO MODERN TIMES/LECTURE, DISCUSSION

Examines the urban experience in what is now the United States from its multiethnic colonial origins to its multiracial present. Emphasizes the relationship between the spatial and the socio-political organization of the city, from

the Salem witch-hunts through the Los Angeles riots. Focuses on several case studies, including Worcester and New York City. Fulfills the historical perspective requirement. Ms. Richter/Offered every year

117 INTRODUCTION TO HEBREW BIBLE I: NARRATIVE AND LAW

See Jewish Studies 117. Mr. Fox/Offered every year

120 WRITING HISTORY/PROSEMINAR

Introduces students to the discipline of history, with emphasis on the different types of historical writing and on the issues involved in the research and writing of historical studies. Fulfills the historical perspective requirement. Mr. Ropp, Ms. Richter/Offered every semester

140 ENGLAND TO 1688/LECTURE, DISCUSSION

Women in European History. An introductory survey of the history of England in the medieval and early modern periods, from the 11th through the 17th centuries. Students will examine how the lives of men and women in England changed over these centuries due to transformations in social life and structure, in the economy, in demography, in the political climate, and in the intellectual and religious spheres. Ms. Froide/Offered periodically

145 U.S. HISTORY THROUGH THE NOVEL/LECTURE, DISCUSSION

Introduces American history with a distinctive and unconventional approach, resting on the assumption that we can gain access to the past by reading fiction. Students learn how to approach imaginative literature from an historical perspective and to appreciate the historical insight of writers who were keen observers of aspects of the making of modern America. Fulfills the historical perspective requirement. Mr. McCoy/Offered every year

150 JERUSALEM IN HISTORY AND IMAGINATION/LECTURE, DISCUSSION

See Jewish Studies 150. Mr. Burke, Mr. Fox

157 THE AGE OF NERO/LECTURE, DISCUSSION

See Ancient Civilizations 157. Mr. Burke/Offered every other year

161 HISTORY OF MODERN INDIA/LECTURE, DISCUSSION

Through the study of cultural and historical documents as well as modern historical scholarship, studies the history of India emphasizing the nature of British rule in India from the 17th century to the mid-20th century. Formerly titled British India. Fulfills HP requirement. Staff/Offered periodically

162 THE HISTORY OF THE MODERN MIDDLE EAST/LECTURE, DISCUSSION

Focuses on Middle Eastern history and society from World War I to the present. Major themes include the collapse of the Ottoman Empire and the emergence of nation-states; colonial rule in the Arab world and the struggle for independence, the Arab-Israeli conflict; the rise of Islamic fundamentalism, and the impact of oil. Fulfills the historical perspective requirement. Mr. Little, Staff/Offered periodically

173 THE HISTORY OF RACIAL THOUGHT IN MODERN EUROPE/LECTURE, DISCUSSION

Surveys European racial thought from the 15th to the 20th century. Places racial thinking over the last five centuries in the context of social, economic, cultural and political trends. Attention is also paid to the history of minority groups in Europe and European encounters with non-European peoples in the wider world. Some effort is made to compare European racial thought to what happened in other countries, such as the United States and Japan. Fulfills the historical perspective requirement. Mr. Gellately/Offered every year

174 THE JEWISH EXPERIENCE/LECTURE, DISCUSSION

Surveys history of the Jewish community and the development of Judaism from the era of Alexander the Great (c. 325 B.C.E.) to the present. Examines the major political, religious, social, and economic trends of each period as they affected the Jewish community and the development of Judaism. Emphasizes elements of change and continuity as well as interaction of the Jewish community with the larger culture and community. Fulfills historical perspective requirement. Staff/Offered every year

175 THE HISTORY OF THE HOLOCAUST TO 1933/LECTURE, DISCUSSION

This course is the first of a two-part course on the History of the Holocaust. It will examine the roots of this cataclysm of western civilization up to the eve of World War II. Formerly numbered Hist 278, The History of the Holocaust to 1933. Staff/Offered every year

176 THE HOLOCAUST IN HISTORICAL PERSPECTIVE/LECTURE, DISCUSSION

Studies the central issues of Holocaust history: the Jewish communities of Europe, especially Eastern Europe, before World War II; Nazi ideology and the background of Weimar Germany; Nazi ascent to power; anti-Jewish policies; Jewish reactions and responses; the Nazi onslaught on Polish Jewry after the conquest of Poland in 1939; the Jewish Councils; Jewish reactions in Eastern Europe; development of Nazi policies until and including the "final Solution"; Jewish reactions in Central and Western Europe; Jewish resistance—armed and unarmed; concentration camps and death marches; issues of interpretation and controversies. Fulfills the historical perspective requirement. Staff/Offered periodically

178 SOUTH AFRICA: HISTORY AND CONTEMPORARY POLITICS/LECTURE, DISCUSSION

See Government 178. Ms. Grier/Offered every year

179 THE HISTORY OF TRADITIONAL AFRICA/LECTURE, DISCUSSION

Introduces the history of Africa south of the Sahara. Begins with early civilizations of Kush, Axum, Ghana, Mali, Songhai, Benin, the Zanj, Congo, and Zimbabwe and continues through the arrival of Europeans. The approach is largely historical and anthropological. Fulfills the historical perspective requirement. Staff/Offered periodically

180 HISTORY OF MODERN AFRICA/LECTURE, DISCUSSION

Introduces students to major themes of modern African history. Begins with orientation to pre-colonial Africa and considers the imperial years, the struggle for independence, the 1960s as a decade of independence, and the 1970s

and 1980s as a search for identity and development. Focus is on the years since 1945. Fulfills the historical perspective requirement. Staff/Offered periodically

181 CHINESE CIVILIZATION/LECTURE, DISCUSSION

Focuses on Chinese life, institutions, and culture from the earliest times through the mid-19th century. Creative literature, philosophical writings, and selected primary documents supplement information presented in interpretive texts and lectures. Fulfills the historical perspective requirement. Mr. Ropp/Offered every other year

182 MODERN CHINA/LECTURE, DISCUSSION

Introduces events, personalities, and concepts of importance for understanding China's history from the early 19th century to the present. Readings that present the Chinese view of events supplement interpretative studies by Western scholars. Fulfills the historical perspective requirement. Mr. Ropp/Offered every other year

184 MODERN JAPAN/LECTURE, DISCUSSION

Examines Japanese political, social, economic, diplomatic, and cultural history from approximately 1800 to the present. Focuses on issues arising in the transition of a non-Western culture from a feudal society to a modern political-economic unit. Fulfills the historical perspective requirement. Staff/Offered every other year

201 ERA OF THE AMERICAN REVOLUTION/LECTURE, DISCUSSION

Studies the origins, character, and consequences of the American Revolution, from the erosion of imperial authority in the 1760s and 1770s to the Constitutional Convention of 1787. Emphasizes relation of ideology and political ideas to social development. Mr. McCoy/Offered every other year

202 THE EARLY AMERICAN REPUBLIC/LECTURE, DISCUSSION

Studies formation and testing of the early U.S. from the adoption of the Constitution through the Jacksonian era. Emphasizes ideology, public policy, and the problem of national integration

during an age of extraordinary territorial and economic expansion. Mr. McCoy/Offered periodically

203 SEMINAR IN U.S. URBAN HISTORY: COLONIAL - MODERN PERIOD/SEMINAR, DISCUSSION, RESEARCH

Examines the urban experience in what is now the U.S. from its multiethnic colonial origins to its multiracial present. Emphasizes the relationship between the organization of space in the city and the social and political organization of the city, from witch-hunts to riots. Staff/Offered periodically

204 INTERPRETATIONS OF AMERICAN HISTORY/PROSEMINAR

A colloquium that takes a broadly conceptual and historiographical approach to the literature in early American history, from the origins of colonization to approximately 1820. Permission of the instructor is required. Mr. McCoy/Offered periodically

209 AMERICA IN OUR TIME: THE U.S. SINCE 1968/LECTURE, DISCUSSION

Examines the recent American past from Watergate through "Generation X." Utilizes film and video to reacquaint students with figures ranging from Elvis Presley and Richard Nixon to Ronald Reagan and Anita Hill. Major themes include the death and rebirth of the affluent society, the persistence of ethnic and racial conflict, and the waning of the Cold War. Formerly titled: The U.S. Since 1945. Staff/Offered periodically

210 RESEARCH SEMINAR IN EARLY AMERICAN HISTORY/RESEARCH SEMINAR

A combination of individual and collective endeavors. Focuses on historical research and writing. Students research a topic in early American history through the Civil War. Permission of the instructor is required. Mr. McCoy/Offered periodically

211 AMERICAN CONSUMER CULTURE/SEMINAR

Investigates the nature and meaning of the consumer experience in American History. Draws upon studies of advertising, domestic life, and urban institutions and examines the varied ways in which historians have defined

and interpreted the importance of consumption within American life. Introduces students to the process of primary historical research. Ms. Richter/Offered periodically

213 GENDER AND THE CITY IN THE U.S./DISCUSSION, RESEARCH

Focusing on the 19th and 20th centuries, examines where urban life for men and women diverged and where it met. Readings on men, women, and urban space, reform movements, utopian ideals, and other topics are followed by student research projects using local resources. Ms. Richter/Offered periodically

214 THE AMERICAN CIVIL WAR/LECTURE, DISCUSSION

Examines events and trends precipitating the single greatest crisis in American history, the Civil War of 1861-65. Includes consideration of the behavior and experience of Americans during the war itself. Mr. McCoy/Offered every other year

215 THE AGE OF LINCOLN/PROSEMINAR

A reading, discussion, and research course focusing on an extraordinary individual and his times. Emphasizes biography and the relationship between the private and the public in Abraham Lincoln's life, which becomes the vehicle for understanding better the distinctive problems and concerns of American society, culture, and politics from approximately 1815 through the end of the Civil War. Mr. McCoy/Offered every other year

216 AMERICAN HISTORY IN COMPARATIVE PERSPECTIVE/PROSEMINAR

Content and topics vary with instructor's interests. A reading and discussion course exploring the advantages of taking a comparative approach to selected key themes and issues in the history of the United States. Permission of the instructor is required. Staff/Offered periodically

217 RECONSTRUCTION: AMERICA AFTER THE CIVIL WAR, 1865-1877/SEMINAR

Examines American history in the post-Civil War period, from 1865 to 1877, a period of national redefinition and political and social

experimentation. Explores how Americans struggled with the consequences of the Civil War and emancipation. Grounds students in the historical literature of the Reconstruction era while emphasizing original student research in local sources. Ms. Greenwood/Offered every other year

219 HISTORY OF AMERICAN WOMEN/LECTURE, DISCUSSION

Examines female experience in the U.S., focusing on issues of power, race, ethnicity, and class, and on concepts of work, family, and gender, with their ramifications for the world of both sexes. Fulfills the historical perspective requirement. Ms. Richter/Offered every year

220 COMMUNITY HISTORY/RESEARCH SEMINAR

Focuses on the University Park neighborhood and its immediate environs. Students pursue original research—on a micro level—of some major topics in U.S. social history. Prerequisite: Hist. 12, U.S. History Since 1865 or Hist. 16, Race & Ethnicity in American History. Ms. Greenwood/Offered periodically

221 FROM SLAVERY TO FREEDOM/LECTURE, DISCUSSION

Examines the historical experience of blacks in America from the colonial period to the present. Explores the evolution of slavery, changing conceptions of race, blacks in the Civil War and Reconstruction, the Great Migration, and the Civil Rights Movement. Fulfills the historical perspective requirement. Formerly titled: African-American History. Ms. Greenwood/Offered every other year.

222 HISTORY OF THE SOUTH/LECTURE, DISCUSSION

Explores the history of the South from the colonial period to the present, focusing on how the South developed as a distinctive region of the United States. Examines development of slavery; impact of slavery on the economy, politics, and culture of the South; race, class, and gender in the Old and New South; myth and reality of the New South; the South in the 20th century. Ms. Greenwood/Offered every other year

223 THE CIVIL RIGHTS MOVEMENT/LECTURE, DISCUSSION

Examines roots and evolution of the Civil Rights Movement from the 1930s to the present. Includes civil rights as a grassroots movement; the New Deal, World War II, and civil rights; emergence of Martin Luther King; women and the Civil Rights Movement; black power; the disintegration of the movement; the meaning of civil rights today. Ms. Greenwood/Offered every other year

224 HISTORY OF AFRICAN-AMERICAN WOMEN/SEMINAR

See Government 225. Ms. Grier/Offered every year

229 WOMEN IN EUROPEAN HISTORY/LECTURE, DISCUSSION

Examine the history of European women up to 1800. Topics will include pre-modern ideas about women and gender; women's role in and relationship to religion; women's work; women's position within the household; comparisons between rural and urban women, and between elite, middle class, and peasant women; the effect of marital status on single, married, and widowed women; the effects of major historical changes such as the Reformation and the rise of capitalism on women; and the emergence of movements for women's rights. Ms. Froide/Offered periodically

230 ARMENIAN GENOCIDE/LECTURE, DISCUSSION

Examines the various dimensions of the Armenian Genocide, through scholarly analyses, survivor narratives, journalistic accounts, and other resources. Through the course, students develop a detailed understanding of the actual events of the genocide, its social and political causes, and its immediate and long-term impact on individual Armenians and the Armenian nation generally. Students will also treat in-depth the initial external response to the genocide, its political and legal aftermath, and the significant effort still made by the Turkish successor state to deny that the genocide occurred. Mr. Payaslian/Offered periodically

231 AMERICA IN THE GILDED AGE, 1877–1900/PROSEMINAR

Focuses on a volatile period of American history, the Gilded Age, 1877 to the turn of the century. Examines Gilded Age society, culture, economy, and politics. Includes immigration and urbanization, industry and labor relations, family life, and agrarian movements.

Ms. Greenwood/Offered every other year

233 CONFUCIANISM, DAOISM, BUDDHISM: INTELLECTUAL HISTORY OF CHINA/LECTURE, DISCUSSION

Explores the three major intellectual traditions of China, with special emphasis on the ethical values of each tradition and their historical and contemporary relevance. Fulfills the values perspective. Not open to students who have taken the first-year seminar, History 033.

Mr. Ropp/Offered periodically

238 FROM WORLD WAR THROUGH COLD WAR: U.S. FOREIGN RELATIONS SINCE 1939/LECTURE, DISCUSSION

Analyzes America's rise to globalism from World War II through the Cold War and beyond, focusing on key policymakers like FDR, JFK, Henry Kissinger, and Bill Clinton. Topics include the atomic bomb, the CIA, the Vietnam War, and the Arab-Israeli conflict. Special emphasis on the dilemmas of the 1990s—the Gulf War, Bosnia, and economic rivalry with Japan. Formerly titled U.S. Foreign Relations since 1914. Staff/Offered every other year

239 U.S. CONSTITUTIONAL LAW: CIVIL LIBERTIES/LECTURE, DISCUSSION

See Government 272. Replaces 254/History 239, American Constitutional Law. Mr. Miller/Offered every other year

240 U.S. CONSTITUTIONAL LAW: GOVERNMENTAL POWERS/LECTURE, DISCUSSION

See Government 273. Replaces 254/History 239. Mr. Miller/Offered every other year

243 AMERICAN ANTIQUARIAN SOCIETY SEMINAR IN AMERICAN STUDIES/SEMINAR

Given at the American Antiquarian Society (about two miles from Clark); students conduct original research in the society's unique

holdings. Students apply in the spring through Professor Richter. American Antiquarian Society Staff/Offered every year

245 AMERICANS, ISRAELIS AND ARABS/LECTURE, DISCUSSION

See Government 245. Formerly 244. Mr. Lane/Offered every year

246 THE U.S. AND THE PERSIAN GULF/LECTURE, DISCUSSION

See Government 246. Formerly 244. Mr. Lane/Offered every year

249 WOMEN AND WORK IN PRE-INDUSTRIAL EUROPE/SEMINAR

Examines women's work within the context of Western Europe from roughly 1300 to 1800. Issues discussed: Has women's work changed over time or has it remained largely the same from the Middle Ages until the present day? Were capitalism and industrialization detrimental or positive forces for working women? Should work done by women in the household, such as child care and housework, count as legitimate work? Can women's work be studied using the same categories and terminology with which we study men's work? When in this period did women develop a work identity?

Ms. Froide/Offered every other year

252 THE BRITISH EMPIRE/LECTURE, DISCUSSION

Reviews the evolution of the British Empire from the 18th century to the 1960s and 1970s. Four major topics are examined: the rise of the British Empire and key elements contributing to imperial expansion: the American Revolution and its impact on British colonial policy; British imperial expansion in Africa and Asia and problems of colonial administration and stability; and evolution from empire to commonwealth. Mr. Payaslian/Offered periodically

253 EUROPE IN THE AGE OF EXTREMES/LECTURE, DISCUSSION

Deals with Europe in the 20th century and focuses on some of the key social, political, and cultural developments in what turned out to be the most disturbing chapter in Europe's long history. Emphasis is placed on the origins and

impact of the Great Wars; the Russian Revolution and spread of Communism; the Fascist Era in Italy, Germany, and elsewhere. Themes to be explored include the evolution of modernity and its influences on nationalism, imperialism, and racism. An effort is made to explain how Europe, which was thought to be so "advanced" and full of promise in 1900, declined thereafter into an era of conflicting ideologies, war and civil wars, revolution, "ethnic cleansing" and genocide. Formerly titled 20th Century Europe. Mr. Gellately/Offered every year

256 CORRUPTION, CRIME AND CHAOS IN CONTEMPORARY RUSSIA/LECTURE, DISCUSSION

See Government 256. Formerly titled Politics of the Soviet Union and Its Successor States. Ms. Sperling/Offered every year

257 CHRISTIANS AND JEWS IN THE ANCIENT WORLD/LECTURE, DISCUSSION

See Classics 262. Mr. Burke/Offered every other year

258 GENDER, CLASS AND RACE IN MODERN BRITAIN/LECTURE, DISCUSSION

Introduces students to the period between 1700 and 2000 when Britain became one of the most powerful nations in the world. We will look at both Britain's domestic history, as well as its Empire and impact on the modern world; an intellectual revolution in Britain and the importance of Scotland to the Enlightenment; the growth of a world trade empire; the loss of the North American colonies; the impact of the French Revolution on Britain; the ascendancy of the gentry; the question of why Britain had no 18th century revolution. Ms. Froide/Offered every year

259 WAR, REVOLUTION, AND SOCIETY IN MODERN GERMANY/LECTURE, DISCUSSION

Examines key cultural, social and political developments in Germany from the early 19th century, with emphasis on Bismarck's Germany, the era of the First World War, the Revolution of 1918-19, and the Weimar Republic. This is the first of a two-part course on the history of modern Germany. It also provides an introduction to the Nazi period,

though this turbulent and tragic time is studied in depth in the second semester course. Formerly titled "Modern Germany." Mr. Gellately/Offered every other year

260 RESCUE AND RESISTANCE DURING THE HOLOCAUST/SEMINAR

Investigates rescue and resistance activities during the Second World War. Our aim will be to come to a critical understanding of what we mean by "rescue" and "resistance," and to analyze how these undertakings were organized, who participated in them, and why people felt compelled to do so. Looks at the role and function (if any) of age, gender, degree of religious observance, political affiliation, and social class in our attempts to understand not only what activities were undertaken, but the motivation for such actions. Ms. Dwork/Offered every third year

261 JEWISH CHILDREN IN NAZI-OCCUPIED EUROPE/SEMINAR

Jewish children had many different types of living experiences during the war years. The purpose of this course is to study the lives of European Jewish children during and after the occupation years. Studying the youngest and most vulnerable members of society, students will learn about the children themselves and about the adults who framed and shaped their lives. Ms. Dwork/Offered every third year

262/362 SCIENCE, MEDICINE AND RACE IN MODERN EUROPE/SEMINAR

Emphasizes how scientists, medical professionals, and others in the biomedical community in Europe set out to construct what they deemed to be the "perfect" race and harmonious society. The course examines new scientific and medical disciplines, life eugenics, racial hygiene, and social medicine intended to improve the race and transform societies. Mr. Gellately/Offered periodically

263 NAZI TERROR IN GERMANY AND EUROPE/LECTURE, DISCUSSION

Investigates the emergence of the Gestapo and concentration camp systems in Germany between 1933 and 1939 and the revolutionary transformations brought about by WWII.

Traces the interaction between the institutions of the terror, the persecutions of those defined as “outsiders” and “ordinary” people. Includes discussion of collaboration, persecution and resistance, and concludes with a brief examination of Denazification, the Nuremberg trials, and neo-Nazism. Mr. Gellately/Offered periodically

264 INTIMACY AND DICTATORSHIP/SEMINAR

Examines history by way of personal and intimate documents—such as diaries and letters—written during modern European dictatorships. A wide range of materials penned by witnesses, victims or victimizers is studied. A critical evaluation of the times as seen and recorded by contemporaries, will help to illuminate history in the making. Attention is paid to the interaction of the personal and political in the great upheavals of the 20th century, including Russia under Stalin, Italy under Mussolini, but the emphasis is on the Third Reich and the Holocaust. Mr. Gellately/Offered every other year

265 LIFE AND DEATH IN THE CITY: OCCUPIED EUROPE, 1939-1945/SEMINAR

Examines the daily lives of ordinary people — gentile and Jewish — in the cities of occupied Europe during WWII. Ms. Dwork/ Ms. Pritchard/Offered periodically

267 RELIGIOUS EXPERIENCE IN THE ANCIENT WORLD/LECTURE, DISCUSSION

See Ancient Civilizations 267. Mr. Burke/Offered every other year

268 THE HOLOCAUST: ISSUES AND CONTROVERSIES/SEMINAR

See History 368. Permission of the instructor. Mr. Gellately/Offered periodically

270 HOME FRONTS IN WORLD WAR II/SEMINAR

Studies how the war fundamentally and dramatically affected societies behind the lines. The course focusses on the three main European combatants — Germany, the Soviet Union, and Great Britain, but some effort is made to compare and contrast what happened in the United States and Japan. The course compares the home fronts with regard to themes such as mobilizing the population,

integrating women, and dealing with youth. It studies the styles and approaches of wartime leaders to the many challenges they faced at home, and explores the uses made of propaganda to uphold morale and to represent the enemy. An effort is made to look at what happened to social outsiders, such as those who were deemed “race enemies” and aliens. There is attention to out groups, like dissenters, pacifists, deserters and delinquents. Mr. Gellately/Offered every other year

273 LIFE UNDER OCCUPATION/SEMINAR

Examines life under German occupation critically. The life of Jews under German occupation clearly was different than the life of their gentile neighbors, but what is equally true but not so obvious is the difference in occupation regimes across Europe. To highlight that fact and the embedded issues, the course will focus on Poland, France, Bulgaria, the Netherlands, and Denmark. Particular attention will be paid to the history of France, because of the division between the north and south, and the role of Petain and Vichy. Ms. Dwork/Offered every third year

274 THE FATE OF THE SHETEL DURING THE HOLOCAUST/SEMINAR

Deals with Brest-Litovsk as an example of Jewish settlements in Eastern Europe and their fate during the Holocaust. Additional communities will be brought in by way of comparison, mainly Hrubieszow and Kosow Huculski. Comparison with the fate of the larger, better-known Jewish communities in Poland and Lithuania will be drawn. Staff/Offered periodically

275 TWENTIETH CENTURY LATIN AMERICA/PROSEMINAR

In depth examination of various issues, events and people of 20th century Latin America which have, for better or for worse, most shaped Latin America today and where the region is headed in the 21st century. Topics include: human rights, NAFTA, debt and trade plans, race and identity, revolutions, the drug war, the Amazon controversy, and U.S./Latin American relations. Ms. Roazen/Offered periodically

**276 MODERN JEWISH HISTORY AND
THOUGHT/LECTURE, DISCUSSION**

Discusses the emergence of the Jew into modern society after the French Revolution. The political and ideological struggle over emancipation and adjustment are traced through the growth of Jewish denominationalism in Western Europe. The competing ideologies of Jewish nationalism (including those of both Zionist and non-Zionist character) are discussed in the context of Eastern European Jewry and its unique contribution to modern Jewish identity. Course concludes with an examination of the Weimar Republic in Germany (1918-1933) and the independent Polish State (1918-1939). Staff/Offered every other year

**277 THE HISTORY OF ZIONISM IN
ISRAEL/SEMINAR**

See Jewish Studies 277. Staff/Offered periodically

279 LATE IMPERIAL CHINA/SEMINAR

Explores the history of Chinese civilization from the Yuan Dynasty through the late 19th century. Examines the relationship between the Chinese state and society, focusing upon developments of fundamental systems of thought and society. Mr. Massey and Mr. Ropp/Offered periodically

**280 SUPERPOWER SURRENDERING? RUSSIA AND
THE WORLD/LECTURE, DISCUSSION**

See Government 280. Formerly titled Soviet Foreign Policy and Aftermath. Ms. Sperling

**281 THE PEOPLE'S REPUBLIC OF CHINA/LECTURE,
DISCUSSION**

Surveys life in the People's Republic of China from 1949 to the present. Includes a history of the People's Republic, and attention to such themes as politics, society, family life, economics, foreign relations, literature, and the arts. Mr. Ropp/Offered periodically

**282 CHINESE WOMEN IN LITERATURE AND
SOCIETY/LECTURE, DISCUSSION**

Examines the changing role of women in Chinese society from the 17th century to the

present, primarily through the reading and discussion of Chinese literature in English translation. Mr. Ropp/Offered every other year

**284 THE HOLOCAUST AND ITS AFTERMATH,
1933-1996/LECTURE, DISCUSSION**

Although this course is the second part of a two-semester course on the History of the Holocaust, the first semester (HIST 175) is not a prerequisite for this course. This term the course will return briefly to 1933 to cover the National Socialist years prior to the war. The purpose of the course is to provide students with a critical, analytical understanding of the Holocaust and the context in which it occurred, and encourage them to think about its long-term effects. Ms. Dwork/Offered every year

286 THE VIETNAM WAR/LECTURE, DISCUSSION

Explores the Vietnam War, emphasizing American involvement in Vietnam in the decade 1965 to 1975. Includes a survey of the history and culture of Vietnam, French experience in Vietnam, and American involvement with Vietnam from World War II to the present. Staff/Offered periodically

**287 ADVANCED TOPICS IN INTERNATIONAL
RELATIONS/SEMINAR**

Content varies with the interests of the instructor. In the past, topics have included the CIA and Covert Action, JFK's Foreign Policy, and American Diplomacy in the Middle East since 1900. Students write research papers based on primary sources. The course is intended for advanced students, particularly history and government majors concentrating on international relations. Formerly titled History 291, Seminar on Advanced Topics in International Relations Seminar. Staff/Offered every other year

288 SEMINAR IN CHINESE HISTORY/SEMINAR

Topical research seminar in Chinese history for those with a concentration in Asian Studies. Prerequisite: Asian Studies 080 or 181 or 182, or by permission. Mr. Ropp/Offered periodically

299 SEC.1 DIRECTED READINGS/TUTORIAL

Undergraduates, normally juniors and seniors, design a directed readings course consisting of a sequence of structured readings on a topic approved and supervised by an instructor. Prerequisite: permission of instructor. Offered for variable credit. Staff

299 SEC.2 RESEARCH PROJECTS/TUTORIAL

Undergraduates, normally juniors and seniors, construct an independent research course with an instructor of their choosing. Prerequisite: permission of instructor. Offered for variable credit. Staff

Departmental Honors

299 SEC.8 HONORS THESIS RESEARCH

Honors students receive up to two credits for thesis research. Honors students preparing for the comprehensive exam receive credit for their reading under History 299. Offered for variable credit. Staff/Offered every year

299 SEC.9 INTERNSHIP

Students who undertake an interdisciplinary internship for more than two credits may receive up to two credits in history and the remainder in another department. Prerequisite: permission of instructor and of chair. Offered for variable credit. Staff

Graduate Courses

300 READINGS IN AMERICAN COLONIAL HISTORY/TUTORIAL

Independent studies. Offered for variable credit. Mr. McCoy

301 STUDIES IN THE AGE OF THE AMERICAN REVOLUTION/TUTORIAL

Independent studies. Offered for variable credit. Mr. McCoy

303 SEMINAR IN U.S. URBAN HISTORY/SEMINAR

See History 203. Staff/Offered periodically

304 INTERPRETATIONS OF AMERICAN HISTORY/PROSEMINAR

See History 204. Mr. McCoy/Offered periodically

310 RESEARCH SEMINAR IN EARLY AMERICAN HISTORY/RESEARCH SEMINAR

See History 210. Mr. McCoy/Offered periodically

313 GENDER AND THE CITY IN THE U.S./DISCUSSION, RESEARCH

See History 213. Ms. Richter/Offered periodically

315 THE AGE OF LINCOLN/PROSEMINAR

See History 215. Mr. McCoy/Offered every other year

330 ARMENIAN GENOCIDE/LECTURE, DISCUSSION

See History 230. Mr. Payaslian/Offered periodically

333 ADVANCED TOPICS IN U.S. WOMEN'S HISTORY/SEMINAR, DISCUSSION, READINGS

An advanced readings course in women's history, looking at major new works and theoretical issues. Ms. Richter/Offered every other year

334 ADVANCED TOPICS IN U.S. WOMEN'S HISTORY/RESEARCH SEMINAR

An advanced research seminar for topics in U.S. women's history. Ms. Richter/Offered every other year

350 STUDIES IN EARLY MODERN EUROPEAN HISTORY/TUTORIAL

Independent studies. Offered for variable credit. Ms. Froide

352 THE BRITISH EMPIRE/LECTURE, DISCUSSION

See History 252. Mr. Payaslian/Offered periodically

356 INTRODUCTION TO ADVANCED STUDIES OF THE HOLOCAUST/SEMINAR

Explores the history of the Holocaust both broadly and deeply. Aims to develop a comprehensive understanding of the pan-European scope of the Holocaust, and a fine-grained knowledge of local conditions and contexts. Using primary and secondary texts, students will explore the role, actions, and lives of all involved groups: perpetrators, victims, bystanders, witnesses, resisters, and rescuers. This seminar is geared to graduate students and open to specially qualified undergraduates. Mr. Gellately/Offered periodically

357 JEWISH CHILDREN IN NAZI OCCUPIED EUROPE/SEMINAR

See History 261. Ms. Dwork/Offered periodically

364 INTIMACY AND DICTATORSHIP/SEMINAR

See History 264. Mr. Gellately/Offered every other year

365 LIFE AND DEATH IN THE CITY: OCCUPIED EUROPE, 1939-1945/SEMINAR

See History 265. Ms. Dwork/Ms. Pritchard/Offered periodically

368 THE HOLOCAUST: ISSUES AND CONTROVERSIES/SEMINAR

Deals with the controversial issues arising out of the representation of the Holocaust in movies (including "Schindler's List") and fictionalized accounts (novels, short stories, plays). As well, the course engages the discussions in progress about public memory (in museums and memorials), and the implications of post modernism for the study of the Holocaust. The course explores other "hot" issues, such as the on-going debate about Daniel Goldhagen's bestseller "Hitler's Willing Executioners." Permission of the instructor. Mr. Gellately/Offered periodically

370 HOME FRONTS IN WORLD WAR II/SEMINAR

See Hist. 270. Mr. Gellately/Offered every other year

383 STUDIES IN CHINESE HISTORY/TUTORIAL

Independent Studies. Offered For Variable Credit. Mr. Ropp

384 HOLOCAUST AND ITS AFTERMATH, 1933-1996/LECTURE, DISCUSSION

See History 284. Ms. Dwork/ Offered every year

391 MASTER'S SEMINAR

University-wide course number reserved for this type of seminar.

392 THESIS RESEARCH

University-wide course number reserved for this research. Variable Credit. Staff

394 GRADUATE RESEARCH SYMPOSIUM

University-wide course number reserved for this type of course.

397 MASTER'S THESIS

University-wide course number reserved for work on the Master's thesis. Variable Credit. Staff

398 DOCTORAL DISSERTATION

University-wide course number reserved for doctoral dissertation work. Variable Credit. Staff

399 GRADUATE READINGS

Offered for variable credit. Staff

INTERNATIONAL DEVELOPMENT

Program Faculty

Kiran Asher, Ph.D.: *culture and power, political economy, gender studies, politics of biodiversity conservation, Latin American studies*

Timothy J. Downs, D.Env.: *natural resource management, water supply and sanitation, integrated capacity building, risk analysis, human-environment interaction*

William F. Fisher, Ph.D.: *anthropology, social movements and development, resettlement, ethnicity, political economy, South Asia*

Laura Hammond, Ph.D.: *anthropology, refugees and forced migration, conflict, disaster management, food security, East Africa*

R. Gil Pontius Jr., Ph.D.: *geographic information science, quantitative modeling, spatial statistics, sustainability*

IDCE Research Faculty

Richard Ford, Ph.D.: *resource management, participation, African history*

Barbara Thomas-Slayter, Ph.D.: *local institutions and organizations, women and public policy, peasant-state relations, gender issues, nongovernmental organizations*

Adjunct and Affiliate Faculty

Yuko Aoyama, Ph.D.: *Geography*

Parminder Bhachu, Ph.D.: *Sociology*

Joseph deRivera, Ph.D.: *Psychology*

Jody Emel, Ph.D.: *Geography*

Cynthia Enloe, Ph.D.: *Government*

Beverly Grier, Ph.D.: *Government*

Donna Hicks, Ph.D.: *Conflict Mediation*

Robert Hsu, Ph.D.: *Economics*
 Douglas Johnson, Ph.D.: *Geography*
 Dorothy Kaufmann, Ph.D.: *Foreign Languages*
 Laurence Lewis, Ph.D.: *Geography*
 Richard Peet, Ph.D.: *Geography*
 Frank Puffer, Ph.D.: *Economics*
 Dianne Rocheleau, Ph.D.: *Geography*
 Paul Ropp, Ph.D.: *History*
 Henry Steward, Ph.D.: *Geography*
 B.L. Turner II, Ph.D.: *Geography*

Program

How can people of industrialized and developing countries work together to realize their greatest potential while sustaining the environment? This is the challenge for developers and planners working around the globe—on the plains of Kenya, hillsides of Nepal, and the Pacific lowlands of Colombia. Students in the Program for International Development and Social Change learn from faculty engaged in proactive, cross-disciplinary approaches to development in Asia, Africa, Latin America, and the United States. It is one of the few programs in the nation to offer a liberal arts B.A. degree centered on grass-roots development. The program's teaching and research focus on increasing understanding of global interdependence, with the realization that the challenges of globalization and natural resource management affect us all.

The ID Program, part of the Department of International Development, Community, and Environment, permits students to design their own interdisciplinary curriculum to study development problems. Majors can focus on a variety of areas, including natural resources management, rural development, gender issues, conflict management, or international political economy.

ID students will discover a program offering intellectual excitement; a diversity of students, ideas, and perspectives; and innovative approaches to address development issues. Clark's ID Program provides opportunities to develop the skills to participate in building local and global communities in the 21st century.

Undergraduate Major in International Development and Social Change

Undergraduates majoring in international development:

1. Attain an understanding of development processes and their political, economic, historical, theoretical, institutional, and ecological aspects.
2. Master basic skills, including quantitative analysis, research methods, and techniques of economic and social analysis. Competence in a foreign language is strongly encouraged.
3. Develop an investigative/research approach to a problem and apply theoretical knowledge in an internship.
4. Pursue a career track—for example, resource management or gender and development—chosen with a faculty advisor.

Course Requirements for Majors

1. **Orientation Courses** (5 credits): Majors must take the introductory course ID 125, *Development Problems*; a course in development economics; and three additional core courses in politics, resource management, and sociocultural issues. Students transferring from other majors or universities may substitute equivalent courses.
2. **Area of specialization** (4 credits): Majors will take at least four courses in an area of specialization selected with an ID faculty advisor. Students may follow one of several established tracks—for example, resource management, rural development, ethnicity and nationality, or gender issues. A student may design a course sequence, subject to approval by a faculty member, creating a new focus. The area of specialization is an opportunity to link interest in development with a focus in a specialized field.
3. **Skills courses** (3 credits): Majors must take a course in social science research methods and two courses from the following: computer science, statistics, geographic information systems (GIS), cartography, conflict negotiation, or a language.

4. **Capstone seminar** (1 credit): Seniors take this seminar in the spring term to explore advanced topics in international development.
5. **Internship** (1 credit) : Majors enroll in a one-credit internship related to international development. This may be combined with a junior year study abroad program.

B.A. Minor

The ID minor consists of six credits, four of which focus on a development theme identified by the student and approved by his/her advisor. The six include one introductory course (ID 120, ID 125, or ID 131), two 100-level courses, two 200-level courses, and one skills course from among those accepted for the ID major. No more than two credits can come from an internship or study abroad. They will be assessed for equivalence to the 100- or 200-level courses.

Honors Program

The Honors Program gives students the opportunity to conduct independent research on a topic of particular interest. Honors is open to juniors who, by the end of the first semester of the junior year, have a minimum grade point average of 3.25 overall and 3.5 in the ID major and who can demonstrate the appropriate research background to undertake independent research in ID.

To graduate with honors, a student must successfully complete a two-semester independent honors project conducted under the supervision of a faculty member. A student must declare her/his intention to register for honors work no later than the end of spring semester of the junior year (for work to be completed during the senior year). Successful completion of an honors project will be recognized at Commencement.

The Five-year BA/MA Program

The five-year BA/MA program provides more intensive study of international development or community development and planning in

combination with a liberal arts degree. Majors in any undergraduate field may be accepted for the MA degree, although preparation for the program is easier for ID majors. ID majors can be admitted into the five-year program without any additional requirements. Majors in other disciplines must supplement their courses with a number of preparatory courses in ID. Clark students are eligible for full- or reduced-tuition fellowships during a fifth year of study. Full tuition remission requires a minimum cumulative average of 3.25. Please refer to the Guide to Accelerated Degree Programs.

Students admitted to the BA/MA program take two 200-level ID courses (including the ID Senior Capstone) in their senior year, and must complete an internship during the summer between senior and the fifth year. During their fifth year, students take six more courses, including the required core courses: Development Theory, Project Management, and Research Design and Methods. Also required are an additional skills course and another internship/directed reading/directed research project. Application to this program must be made in the first semester of the student's junior year.

Internships and Study Abroad Options

ID majors have taken the opportunity to expand their knowledge of international development beyond the classroom through internships and study abroad programs. Some recent examples include:

- The Women's Forum, Stockholm
- The Clark European Center in Luxembourg
- Royal Institute of International Affairs
- Environmental Defense Fund
- The Women's Studies Group, Oaxaca, Mexico
- Worcester Office of Neighborhood Service
- Amnesty International
- Oxfam America
- Main South Community Development Corporation
- Grassroots International

- World Wildlife Fund
- Citizens Energy Corporation
- Study Abroad Program in Namibia
- Santo Domingo Study Abroad Program in the Dominican Republic

ID Courses

016 INTRODUCTION TO ECONOMIC GEOGRAPHY

Using a global systems approach, surveys the pre-capitalist world, outlines the historical emergence of the world capitalist system, and examines contemporary processes of development and underdevelopment. It surveys features of the world, such as multinational corporations, Fordism, post-Fordism, changing regional systems, environmental problems and the emergence of global culture. A comparative perspective course. Ms. Aoyoma/ Offered every year

069 INTRODUCTION TO INTERNATIONAL RELATIONS/LECTURE, DISCUSSION

See Government 069. Staff/Offered every year

077 INTRODUCTION TO LATIN AMERICAN CIVILIZATION

See History 077. Ms. Roazen/Offered every year

084 JAPANESE CIVILIZATION/LECTURE, DISCUSSION

See History 084. Staff/Offered every year

085 INTRODUCTION TO MAPPING SCIENCES/LECTURE

See Geography 85. Mr. Steward/Offered every year

101 AN INTRODUCTION TO PEACE STUDIES AND THE PSYCHOLOGY OF PEACE

See Peace Studies 101. Mr. DiRivera/Offered every year

102 FIRST-YEAR SEMINAR: SELECTED TOPICS IN GOVERNMENT AND POLITICS

See Government 102. Staff/Offered periodically

103 AFRICA AND THE WORLD/LECTURE, DISCUSSION

Examines the historical and contemporary relationships of sub-Saharan Africa with Europe, the U.S., the Middle East, the Muslim World, and parts of Asia, and Latin America.

Attention is paid to South Africa's relationships with the rest of the world before and after the fall of apartheid. Ms. Grier/Offered every other year

107 MIRACLES OF ASIA/LECTURE, DISCUSSION

What explains the rapid rise of Asian economies, and what prompted the sudden crises? This course provides a foundation in understanding the primary factors in the most successful form of industrialization in the latter 20th century, by focusing on the role of the state, export-led industrialization, and industrial organization of Japan and newly industrializing economies of East and Southeast Asia. The course covers some of the major issues and impacts of rapid industrialization on the standard of living, housing, environment, resource extraction, and ethnic relations and contrasts areas of rapid industrialization with areas of stagnation and political instability. The course also presents recent developments including the Asian financial crises, as well as the region's distinctive adaptation to new technologies such as the internet, e-commerce, and video games. Ms. Aoyama/Offered periodically

109 INTERNATIONAL ECONOMICS: TRADE AND FINANCE/LECTURE, DISCUSSION

See Economics 108. Mr. Hsu/Offered every year

120 INTRODUCTION TO SOCIAL ANTHROPOLOGY/LECTURE, DISCUSSION

Provides an introduction to social/cultural anthropology's theories and methodologies through study of its principal medium of analysis, the ethnography. Students will explore several different types of cultural study: hunter-gatherers in Central Africa, gender relations in a Middle Eastern society, and contemporary problems in American inner cities. Anthropological approaches to study of power, identity, social structure, religion, ethnicity, economics and development will also be discussed. Students learn the methods of anthropological research first-hand through conducting their own fieldwork projects. Ms. Hammond/Offered every year

125 TALES FROM THE FAR SIDE: DEVELOPMENT AND UNDERDEVELOPMENT IN THE AGE OF GLOBALIZATION/LECTURE, DISCUSSION

Discussions of geopolitics invariably refer to the problems of Third World (under) development. What is so compelling about the idea of development? Why does it ail much of the so-called Third World? What are some of the solutions to development dilemmas—neoliberal market reforms or attention to women, ethnic groups, and other heretofore marginal issues such as the environment? Or is the development enterprise fundamentally flawed as some postcolonial scholars claim? This course introduces students to key histories, concepts, and debates in international development through critical and analytical engagements with fiction, films, and theoretical literatures on the subject. Ms. Asher/Offered every year

126 LIVING IN THE MATERIAL WORLD: THE POLITICAL GEOGRAPHY OF RESOURCE DEVELOPMENT/LECTURE, DISCUSSION

See Geography 126. Ms. Emel/Offered every other year

127 POLITICAL ECONOMY OF THIRD WORLD UNDERDEVELOPMENT/LECTURE

Surveys the leading theories of development: classical, neoclassical, and Keynesian economies, sociological modernization theory, Marxist and neo-Marxist theories, post-structural critiques, post developmentalism, feminism and feminist critiques of development. A comparative perspectives course. Mr. Peet/Offered every year

130 ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION

See Econ 128. Mr. Hsu/Offered every other year

131 LOCAL ACTION, GLOBAL CHANGE/LECTURE, DISCUSSION

Introduces students to activism in a broad sense: as both a tool for political action and a mechanism for social and/or economic change. International and community development are discussed as forms of activism. Texts focus on activism not only as it is understood and practiced in the US, but also as it is found in other

parts of the world. This includes grass-roots movements against the establishment of dams in India and transnational networking of environmental, women's rights, and human rights activists. In addition, globalization is considered from an activist perspective—both positive and negative approaches to globalization are examined. Religious-based terrorism is also considered as a form of extreme activism which is in many ways a reaction to perceived injustice, oppression, and lack of alternatives. Students participate in a project at the community or wider level in order to learn about how activism works practically. Students will experience first-hand the opportunities and challenges to affecting change, protecting human rights, or raising public awareness. Ms. Hammond/Offered every year

136 SUB-SAHARAN AFRICA: ISSUES AND PROBLEMS/LECTURE, DISCUSSION

Explores issues confronting sub-Saharan Africa, including the legacy of colonialism, the establishment of nation-states, and the role of parties and the military in the politics of selected countries. Women's roles, class conflict, alternative development strategies, the environment, regional conflicts, and the global economy are examined. Ms. Grier/Offered every other year

138 GENDER, SPACE, AND ENVIRONMENT/LECTURE, DISCUSSION

Explores how gender is reflected in the landscape, in our settlement and land-use patterns, in environmental history, and in our present ecological science and practice from the global to the local level. Combines lectures, readings, discussions, films, and local field trips. Reviews feminist and other alternative explanations of the gendered nature of knowledge, access, use, and control of space and resources in environments—past, present, and possible. Regional focus on New England, a values perspective course. Ms. Rocheleau/Offered every year

155 ECONOMICS OF NATURAL RESOURCES AND THE ENVIRONMENT/LECTURE, DISCUSSION

See Economics 157. Ms. Geoghan/Offered periodically

161 CULTURAL IDENTITIES AND GLOBAL PROCESSES/LECTURE, DISCUSSION

See Sociology 161. Ms. Bhachu/Offered every year

170 ECOLOGY AND ECONOMY IN THE TROPICS/LECTURE, DISCUSSION

In the ecological conditions of the tropics, how can we reduce hunger and improve economic conditions sustainably? Examines how economic management in tropical ecosystems interacts with cultural history, natural resources, economic theory, and international institutions. Classroom discussions focus on readings, while each student may focus on a topic of individual interest in course projects. Mr. Pontius/Offered periodically

171 INTERNATIONAL PERSPECTIVES ON ENVIRONMENTAL PROBLEMS AND POLICIES/LECTURE, DISCUSSION

See EN 171. Mr. Downs/Offered every year

173 LATIN AMERICA SINCE 1825/LECTURE, DISCUSSION

See History 177. Staff/Offered periodically

174 INTERNATIONAL POLITICAL ECOLOGY/LECTURE, DISCUSSION AND FIRST-YEAR SEMINAR (ALTERNATE YEARS)

Integrates ecology and political economy from local to global scale through case studies. Starts from a view of people in environmental "hot spots," following links to the world economy and planetary ecosystems. Explores connections of international, environmental, and economic policy, with everyday realities and possible ecological futures of people from the Amazon rainforest to Worcester. Offered as a first-year seminar (fulfills the comparative and verbal expression requirements) and lecture course fulfills comparative perspective) in alternate years. Ms. Rocheleau/Offered every year

176 COMPARATIVE ECONOMIC SYSTEMS/LECTURE, DISCUSSION

Examines variety of developed market economies and transitional and developing economies. Topics include Japan's industrial policy and business groups, Germany's social market economy and codetermination, Sweden's welfare state and labor unions, eco-

nomic reforms in China and Russia, and economic development in Korea. Prerequisite: Economics 10. Mr. Hsu/Offered every year

177 JAPANESE AND CHINESE ECONOMIES/LECTURE, DISCUSSION

See Econ 177. Mr. Hsu/Offered every other year

178 TRANSITIONS TO DEMOCRACY/LECTURE, DISCUSSION

See Government 177. Ms. Sperling/Offered every other year

179 AFRICA UNTIL 1500/LECTURE, DISCUSSION

See History 179. Staff/Offered periodically

180 HISTORY OF MODERN AFRICA/LECTURE, DISCUSSION

See History 180. Staff/Offered every other year

181 CHINESE CIVILIZATION/LECTURE, DISCUSSION

See History 181. Mr. Ropp/Offered every other year

183 MODERN CHINA/LECTURE, DISCUSSION

See History 182. Mr. Ropp/Offered every other year

184 MODERN JAPAN/LECTURE

See History 184. Staff/Offered every other year

185 LANDSCAPES OF THE MIDDLE EAST/LECTURE, SEMINAR

See Geography 184. Mr. Johnson/Offered every other year

189 INTRODUCTION TO REMOTE SENSING AND GEOGRAPHIC IMAGERY/LECTURE, LABORATORY

Introduces a powerful methodology for surveying and analyzing geographical phenomena. Examines aerial photography and satellite imagery and their analysis for interpreting, understanding, and representing the environment. Includes image-mapping, photogrammetry, and field surveying. A skills course in the geography major. Mr. Steward/Offered every year

190 INTRODUCTION TO GIS/LECTURE, LABORATORY

Introduces GIS as a data management, analysis, and mapping tool. Stresses fundamental logic and scope of problem solving using raster and vector systems. Although the course is computer-oriented, no programming is involved. A for-

mal analysis (FA) course. Counts as a skills course or core course in Mapping Sciences/Spatial Analysis in geography major. Mr. Marcano/Offered every semester

204 WATERSHED ECOLOGY/SEMINAR

See EN 204. Staff/Offered every other year

208 COMPARATIVE POLITICS OF WOMEN/LECTURE, DISCUSSION

See Government 208. Ms. Enloe/ Offered every other year

211 AFRICAN ENVIRONMENTS AND GEOGRAPHICAL IMPLICATIONS/LECTURE, DISCUSSION

See Geography 211. Mr. Lewis/Offered periodically

213 LATIN AMERICAN POLITICS/LECTURE, DISCUSSION

See IDCE 313. Ms. Asher/Offered periodically

218 SEMINAR IN PHYSICAL ENVIRONMENT AND DEVELOPMENT

See IDCE 318. Mr. Lewis/Offered every other year

219 THE POLITICS OF LAND: KENYA, ZIMBABWE, AND SOUTH AFRICA/SEMINAR

See Government 219. Ms. Grier/Offered every year

220 CHILD LABOR AND THE STATE: COMPARATIVE PERSPECTIVES/LECTURE, DISCUSSION

See Government 218. Ms. Grier/Offered every year

225 AFRICAN AMERICAN POLITICS/LECTURE, DISCUSSION

See Government 224. Ms. Grier/Offered every year

226 THE GLOBAL POLITICS OF DEVELOPMENT/LECTURE, DISCUSSION

See Government 227. Staff/Offered periodically

227 COMPARATIVE POLITICS OF RACE, ETHNICITY, AND GENDER/LECTURE, DISCUSSION

See Government 228. Ms. Enloe/Offered every other year

228 ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION

See Econ 228. Mr. Hsu/ Offered every other year.

229 MANAGEMENT OF ARID LANDS/LECTURE, SEMINAR

See Geography 228. Mr. Johnson/Offered every other year

232 POPULATION, ENVIRONMENT, AND DEVELOPMENT/VARIABLE FORMAT

See Sociology 234. Mr. London, Ms. Merrill/Offered periodically

235 POLITICS OF VIETNAM AND THE PHILLIPINES/LECTURE, DISCUSSION

See Government 236. Ms. Enloe/Offered every other year

239 COUNTRY AND CULTURE/LECTURE, DISCUSSION

See Geography 239. Mr. Johnson/Offered every other year

240 HUMAN RIGHTS IN INTERNATIONAL POLITICS/LECTURE, DISCUSSION

Focuses on the cultural context of human rights in order to address three important concerns: How to make human rights relevant in the every day lives of people, especially those outside the industrialized West for whom the international human rights agenda smacks of cultural imperialism. Bringing human rights concerns into the debate on the meaning of political, economic and social development. Understanding the complexities of and obstacles to achieving effective international cooperation and action in support of an inclusive human rights agenda. Follows a lecture discussion format. Case studies will be used to illustrate the theoretical arguments developed in the course, while simulation and role-playing exercises will help us understand the difficulties inherent in coordinating international human rights efforts. Staff/Offered periodically

241 CITIES AND CULTURE: THE EUROPEAN CITY/LECTURE

See Geography 242. Mr. Bowden/Offered every other year

245 CULTURE, POLITICS, AND INTERNATIONAL DEVELOPMENT/LECTURE, DISCUSSION

Examines the interplay of culture and politics with international development practices in an era of increasing globalization. Designed to encourage students to explore recent insights

into the workings of discourse and power, and to examine how we can relate, in both theory and practice, these insights to processes of development and resistance to development in the "third world." Considers specific cases and historical processes to understand the effects on local communities of specific development interventions. Mr. Fisher/Offered periodically

247 GLOBAL STRUCTURES AND DYNAMICS/SEMINAR

See Sociology 288. Mr. Ross/Offered periodically

249 THE FRENCH-SPEAKING WORLD/LECTURE, DISCUSSION

An interdisciplinary analysis of questions of cultural identity as they have been elaborated by Francophone writers during the colonial and particularly the post-colonial period, with special emphasis on French-speaking Africa, the Antilles, and the Maghreb. Through literature, social texts and film we explore such issues as tradition and modernity, conflicts between (and within) indigenous and French social codes; the Algerian war and its legacy; women and Islam. Prerequisite: two French courses above 130 or permission.

Ms. Kaufmann/Offered periodically

251 NON-GOVERNMENT ORGANIZATIONS: CATALYSTS FOR DEVELOPMENT/SEMINAR

Many practitioners and theoreticians, disillusioned with governments in the development process, propose building nongovernment organizations (NGOs) as development catalysts. This seminar explores the proposal in light of the difficulties and progress NGOs have experienced. Staff/Offered periodically

252 CULTURE, CONSUMPTION AND CLASS IN LOCAL AND GLOBAL CONTEXTS/LECTURE, DISCUSSION

See Sociology 250. Ms. Bhachu/Offered every other year

253 SOCIAL MOVEMENTS, GLOBALIZATION, AND THE STATE/LECTURE, DISCUSSION

The emergence of global networks or transnational alliances among local, regional, and national social movements, international nongovernmental organizations, and advocacy

groups has been one of the most politically influential aspects of globalization. This course examines what is "new" about contemporary social movements, the nature of their transnational alliances, and their potential to transform the way states and citizens relate to one another and to the international political arena. The contested nature of civil society, the uneven influence of globalization processes, and changes in the contexts within which local communities and grassroots groups operate are explored through studies of movements concerned with the environment, human rights, development, and women. Mr. Fisher/Offered every year

255 QUALITATIVE RESEARCH METHODS: SKILLS AND APPLICATIONS/LECTURE, DISCUSSION

Students learn to select, combine, apply and evaluate a broad repertoire of selected qualitative research methods from geography, anthropology, planning, cultural studies, women's studies, international development and the social sciences more generally. Also includes more environmentally-oriented methods (also selected) such as mapping, planning, landscape and narrative techniques used in environmental history. These methods, as well as the overview and analytical framework presented in the course, should be useful in community service, public social and environmental services, commercial and private sector applications and academic research setting. A skill or specialization course. Ms. Rocheleau/Offered every year

256 STRUGGLE AGAINST POVERTY/LECTURE, DISCUSSION

Considers worldwide definitions of poverty, recent trends, causes, and effectiveness of different approaches to ameliorate poverty. The course will examine poverty and inequality in a North-South context, taking into account the complex political and cultural issues and perceptions of poverty - and wealth - around the world. As a final project, each student will prepare a proposal, policy, or project designed to alleviate poverty in a specific setting. Staff/Offered periodically

257 GLOBAL ECONOMIC GEOGRAPHIES/LECTURE, DISCUSSION

See Geography 256. Ms. Aoyama/Offered every other year.

258 DEVELOPMENT AND REGIONAL INTEGRATION/SEMINAR

Examines the interplay of culture and politics with international development practices in an era of increasing globalization. Designed to encourage students to explore recent insights into the workings of discourse and power, and to examine how we can relate, in both theory and practice, these insights to processes of development and resistance to development in the "third world." Considers specific cases and historical processes to understand the effects on local communities of specific development interventions. Staff/Offered periodically

259 RELIGION, IDENTITY, AND VIOLENCE IN A GLOBALIZING WORLD

See IDCE 369. Mr. Fisher/Offered periodically

260 QUANTITATIVE MODELING/LECTURE, DISCUSSION, LABS

Investigates the quantitative and qualitative potential of using mathematical computer models to guide policy in human/environment systems. Students learn to think with a systems perspective while translating their own conceptual models to mathematical models to computer models. Includes lab sessions in the computer room and lectures/discussion in the classroom. Culminates in written and verbal presentations of student projects. Students will gain technical proficiency in Excel and other software designed for sustainability analysis. Students can apply what they have learned in Calculus, statistics, and Ecology and Economy in the Tropics. Prerequisites are Math 121 or Math 125 or graduate standing. Mr. Pontius/ Offered every year

261 ROOTS AND ROUTES: IMMIGRANTS, DIASPORAS, AND TRAVEL/LECTURE, DISCUSSION

See Sociology 260. Ms. Bhachu/Offered every year

262 FAMINE AND FOOD SECURITY

Access to food is a vital concern not only for many poor countries, but also for poor sections of wealthier nations. Food insecurity is a major

obstacle to development throughout the world, and can lead to environmental degradation, high morbidity, political instability, and conflict. Famine, a condition of severe food insecurity, is often the result of a complicated mix of natural and human-generated factors. This class will consider famine and food (in)security from anthropological, sociological, political and economic perspectives. Case studies will include Africa, Asia, and Western countries. The relation between food security and development efforts, as the bridge between famine relief and development work which promotes sustainable food security, will be considered. Ms. Hammond/Offered periodically

266 PRINCIPLES OF NEGOTIATION AND MEDIATION: AN OVERVIEW OF CONFLICT RESOLUTION APPROACHES

Offers an overview of the principles of conflict resolution that can be applied internationally as well as interpersonally. A general framework for the understanding of conflict is presented that includes: power-based, needs-based, interest-based, and the relationship-based conceptualizations of conflict resolution. Gives students a theoretical as well as practical experience of conflict. It explores some of the psychological obstacles that impede the resolution process and engages in a number of experiential exercises that help the student develop the interpersonal skills needed to transform conflict relationships. Ms. Hicks/Offered every year

272 TOPOGRAPHICAL MAPPING/SEMINAR

See Geography 296. Mr. Steward/Offered every year

276 FIELD SAMPLING METHODS/LECTURE, LABORATORY

Provides field training with Global Positioning System (GPS) receivers, and integrates the three techniques of GPS, GIS, and image analysis through local field exercises. Provides and overview of sampling methods in order to complete a GIS database development and mapping exercise. Prerequisites: ID 190 or permission of the instructor. Mr. Marcano/Offered every year

277 GENDER, ENVIRONMENT, AND DEVELOPMENT/SEMINAR

Considers gendered identities, affinities, control, responsibility, knowledge, labor, and benefits in the definition, use, management, and protection of environments. Readings, lectures, and discussion focus on distinct perspectives and concerns of women and men as actors in natural resource use and management and in local, regional, and global ecological transformations linked to economic restructuring.

Ms. Rocheleau/Offered every year

278 THE CREATION OF NATIONALISMS, NATIONALIST CULTURES, AND SYMBOLS

See Sociology 255. Ms. Bhachu/Offered every other year

279 TWENTIETH-CENTURY LATIN AMERICA/PROSEMINAR

See History 275. Ms. Roazen/Offered periodically

280 URBAN ECOLOGY: CITIES AS ECOSYSTEMS/LECTURE, DISCUSSION

Explores ecology and physical geography of cities as systems built, inhabited, and “managed” by people. This class of ecosystem is often neglected except in studies of pollution, yet it is home to many of the world’s people and to a surprising number of plant and animal species as well. Readings, lectures, discussion, and written work combine landscape and systems ecology with physical and urban geography to broaden our understanding of city environments, both present and possible.

Ms. Rocheleau/Offered periodically

281 THE PEOPLE’S REPUBLIC OF CHINA/LECTURE, DISCUSSION

Surveys life in the People’s Republic of China from 1949 to the present. Includes a history of the People’s Republic and attention to such themes as politics, society, family life, economics, foreign relations, literature, and the arts.

Mr. Ropp/Offered every other year

282 CHINESE WOMEN IN LITERATURE AND SOCIETY/LECTURE, DISCUSSION

See History 282. Mr. Ropp/Offered every other year

283 TROPICAL ECOLOGY/LECTURE, DISCUSSION

Examines structure and function of several major tropical ecosystems (rainforests, savannas, wetlands, coastal zones, deserts) from the perspective of systems ecology. Readings, lectures, and discussions focus on energy flows, material cycles, and species diversity and distribution. Explores patterns and process in tropical ecosystems (especially forests and savannas) under conditions of widespread land-use change. Ms. Rocheleau/Offered every other year

284 ENVIRONMENT AND DEVELOPMENT IN THE MIDDLE EAST AND NORTH AFRICA/LECTURE, DISCUSSION

See Geography 284. Mr. Johnson/Offered every other year

285 GENDER AND GLOBAL CHANGE/SEMINAR

See IDCE 375. Staff/Offered every other year

286 ADVANCED TOPICS IN COMPARATIVE POLITICS/SEMINAR

See Government 286. Ms. Enloe, Ms. Grier/Offered every year

287 POLITICS AND POWER IN THIRD WORLD SOCIETIES

See IDCE 381. Staff/Offered periodically

288 SEMINAR IN CHINESE HISTORY/SEMINAR

See History 288. Mr. Ropp/Offered periodically

289 ADVANCED DEVELOPMENT THEORY/SEMINAR

See IDCE 389. Mr. Peet/Offered every year

290 SENIOR CAPSTONE SEMINAR

Designed to provide senior ID majors and students entering the BA/MA program the opportunity to apply their undergraduate training to some of the main contemporary and cutting-edge themes in international development, as well as prepare them for further work (either advanced study or entry to the job market) in international development. Themes studied include globalization as it relates to international development, refugees and forced migration, human rights, environmental protection, implications for development of the spread of religious-based extremism, food security, foreign policy and humanitarian aid.

Ms. Hammond/Offered every year

292 SEMINAR IN CARTOGRAPHY/SEMINAR

See Geography 294. Offered periodically/Staff

293 ADVANCED TOPICS IN INTERNATIONAL RELATIONS/SEMINAR

Focus changes with each offering, depending on faculty interest. Recent topic:

"Development, Underdevelopment, and the Causes of Internal Conflict." Open to juniors and seniors. Staff/Offered every year

294 HONORS THESIS

Staff/Offered every semester

296 GIS AND LOCAL PLANNING/SEMINAR, PROJECT

Provides field training with Global Positioning System (GPS) receivers, and explores issues and procedures involved in the application of GIS to local government and land use planning. Develops hands-on familiarity with Arc/Info vector-based system and its application in database development (data conversion), routine data management, and planning. Prerequisites: ID 190 and permission. Mr. Marcano/Offered every semester

297 PARTICIPATION AND ENVIRONMENTAL MANAGEMENT/LECTURE, DISCUSSION

Focuses on community-based participation as a means to plan and implement sustainable practices. Examples of local resource user systems are investigated to evaluate how practices of individual managers in the Third World—farmers, herders, fishermen—impact the environment. Staff/Offered every year

298 INTERNSHIP

Contact the IDCE office for internship proposal forms. Staff/Offered every year

299 INDEPENDENT STUDY

Students design an independent research course in conjunction with a professor. Staff/Offered every year

INTERNATIONAL DEVELOPMENT, COMMUNITY, AND ENVIRONMENT

Program Faculty

William F. Fisher, Ph.D., *director:*

anthropology, social movements and development, resettlement, ethnicity, political economy, South Asia

Kiran Asher, Ph.D.: *culture and power, political economy, gender studies, politics of biodiversity conservation, Latin American studies*

Parminder Bhachu, Ph.D.: *urban anthropology, financial globalization, nationalism, gender*

Robert Bradbury, Ph.D.: *health policy, health services research*

Halina Szejnwald Brown, Ph.D.: *toxicology, risk analysis and management, industry and environment, environmental policy, international issues*

Joseph deRivera, Ph.D.: *peace and justice, social psychology*

Timothy J. Downs, D.Env.: *natural resource management, water supply and sanitation, integrated capacity building, risk analysis*

J. Ronald Eastman, Ph.D.: *geography, GIS, remote sensing, cartography*

Jody Emel, Ph.D.: *hydrology, resource/environmental geography, feminist theory*

Cynthia Enloe, Ph.D.: *women and politics, militarization, ethnic and racial politics*

Susan Foster, Ph.D.: *ecology, evolutionary biology, population biology*

Jacqueline Geoghegan, Ph.D.: *resource economics, environmental policy, land use*

Robert L. Goble, Ph.D.: *technology assessment, energy studies, atmospheric transport, risk analysis and management*

Beverly Grier, Ph.D.: *African politics, international development*

Laura Hammond, Ph.D.: *anthropology, refugees and forced migration, conflict, disaster management, food security, East Africa*

Donna Hicks, Ph.D.: *conflict mediation, consensus building*

Robert Hsu, Ph.D.: *economic development*

Douglas Johnson, Ph.D.: *cultural ecology, geography, arid lands management, land degradation*

Dorothy Kaufmann, Ph.D.: *French literature, feminism and women writers*

Laurence Lewis, Ph.D.: *land degradation, geomorphology, tropical agriculture*

Eugenio J. Marcano, Ph.D.: *geographic information systems (GIS), remote sensing, global positioning systems, environmental chemistry*

Richard Peet, Ph.D.: *political economy of development, social theory*

Robert Gil Pontius Jr., Ph.D.: *GIS, quantitative modeling, spatial statistics, development economics*

Frank Puffer, Ph.D.: *regional economics, health economics*

Samuel J. Ratick, Ph.D.: *energy and environmental systems, environment and public policy, hazards, global change, modeling*

Dianne Rocheleau, Ph.D.: *cultural/systems ecology, gender, forestry*

Paul Ropp, Ph.D.: *Chinese social and intellectual history*

Laurie Ross, Ph.D.: *participatory action techniques, urban community planning, community and youth development*

Joseph Sarkis, Ph.D.: *operations management, environmentally conscious business practices*

Henry Steward, Ph.D.: *cartography, remote sensing*

B.L. Turner II, Ph.D.: *cultural/human ecology, sustainability systems, land-cover and land-use change*

Research Faculty

Richard B. Ford, Ph.D.: *African history, resource management, participation, sustainable development*

Christoph Hohenemser, Ph.D.: *physics, technology assessment, hazard management, energy policy*

Barbara P. Thomas-Slayter, Ph.D.: *local institutions, women and public policy, peasant-state relations, gender issues, non-governmental organizations*

Graduate Programs

Clark University's Department in International Development, Community, and Environment (IDCE) addresses one of the greatest challenges of the 21st century: sustaining environmental resources while promoting development. IDCE is an interdisciplinary department that offers four graduate programs: International Development and Social Change (ID); Community Development and Planning Program (CDP); Geographic Information Sciences for Development and Environment (GISDE); and Environmental Science and Policy (ES&P). For undergraduates, there is a B.A. major in International Development and Social Change and in Environmental Science and Policy, as well as an accelerated B.A./M.A. program in both. [NOTE: For descriptions of these undergraduate programs, see their separate program sections of this catalog.]

IDCE teaching and research focus on community-based development and linkages between the human and ecological dimensions of change. Interdisciplinary courses on grassroots participation, conflict resolution, social and environmental analysis, and GIS teach analytical skills and stress sustainable natural resources management. Students learn tools designed specifically to organize information, mobilize resources, monitor environmental trends, or assess land cover change. The IDCE programs enable graduates to link theory and practice and to turn ideals into action as they pursue careers in domestic and overseas development and environmental issues.

With 30 years of field experience in Africa, Asia, and Latin America, and a growing presence in urban neighborhoods, IDCE faculty and students seek three goals: 1) building community, 2) sustaining the environment, and 3) providing tools for analysis and social change. This unique approach builds ownership on local levels and fosters alliances among community groups, governments, and non-governmental organizations. The resulting partnerships encourage collaborative solutions to some of development's most complex problems.

IDCE explores alternative approaches to overseas and domestic development through five key concepts:

Combining theory and practice: IDCE prepares students with development skills and theory, as well as experience in development practice. Through combinations of classes, internships, and field research activities, IDCE scholar practitioners learn specific skills for careers in development.

Stressing analytical tools: Students learn practical tools, especially those in which Clark has made significant contributions in global resource management. For example, Clark Labs created Idrisi, the world's most widely-used raster GIS software. Other core skills include conflict negotiation, socio-economic and gender analysis, and participatory rural appraisal.

Focusing in sustainability: IDCE emphasizes both human and ecological dimensions of sustainability. For example, in the U.S., IDCE faculty have carried out risk analysis to assess exposure to nuclear contamination in Native American communities. In Madagascar, IDCE staff have worked with Malagasy colleagues to increase livelihoods, reduce forest depletion, and use community-based indicators to monitor changes. The research demonstrates that conservation and development are compatible.

Creating partnerships: With its focus on local institutions, IDCE helps local groups come to consensus on priorities. Through structured methodologies, the IDCE approach enables village and community institutions to speak with one voice in development planning, implementation, management, monitoring, and evaluation. United communities are then able to form durable partnerships with government and non-government agencies.

Linking local and global perspectives: IDCE students learn how local problems are affected by multiple economic and political global processes. These influences include interna-

tional trade agreements, pressures on the environment, global environmental accords, and transnational social movement networks.

IDCE graduate students gain insight and experience beyond the classroom through internships in the U.S. and overseas. In the last few years, IDCE students have had internships with:

- The World Bank's Program for Latin American and Caribbean Social and Environment Sustainability, helping to draft an environmental strategy focusing on livelihood and environmental risks
- Catholic Relief Services in Honduras
- The Partnership in Rural Empowerment and Development, helping to lead trainings in participatory rural appraisal in Ghana
- Massachusetts Department of Environmental Protection, identifying air pollution sources
- The Center for Development and Population Activities (CEDPA) in Ghana, designing gender sensitive programs
- California Department of Fish and Game, conducting a habitat assessment for an endangered fish through snorkel surveys
- Environmental Safety and Health Department of Texas Instruments, working on hazardous site closure
- United Nations Environmental Programme (UNEP) in Kenya, writing a Global Environmental Outlook Report
- The Boston Housing Authority, working with Hispanic families to mediate conflicts over housing issues
- The US Forest Service using GIS to help manage a national forest
- Oxfam-America in Cambodia, helping a local organization to build gender awareness
- The Carter Center in Atlanta, working in the Global Development Initiative

IDCE Research Opportunities

IDCE research offers faculty and students the opportunity to work individually and cooperatively on important issues. Recently, IDCE had six Fulbright Fellowships awarded in one year to students to conduct research overseas. Their topics ranged from assessing environmental and cultural impacts of ecotourism in Morocco and monitoring land cover change in a protected area in Sumatra to building a geodatabase on water use at the Water Research Institute in Israel.

Other recent sponsored field research has included:

- an ID major received a Fulbright Research Fellowship to examine how development and conservation initiatives can complement one another in Madagascar.
- a BA/MA student won a Fulbright Fellowship to teach English as a Second Language in Korea and to conduct research on sustainable tourism.
- a graduate student and Kenyan doctor of veterinary medicine received sponsorship from Heifer Project International to write a manual for incorporating gender into livestock extension services in Africa.
- a graduate student and former Peace Corps volunteer in West Africa won a Fulbright Fellowship to use GIS to monitor mangrove deforestation in Senegal.
- a graduate student and former AFRICARE staff member and Peace Corps volunteer won a Switzer Fellowship to study integrating local knowledge and participation into policy management for New England fisheries.

Research Activities

IDCE works closely with the George Perkins Marsh Institute and its affiliated research centers:

The George Perkins Marsh Institute (GPMI) is dedicated to research on one of the most fundamental questions confronting humans: what is and ought to be our relationship with nature? Built on a tradition of basic and applied research on environmental hazards and

international development, the Institute examines human-environment relationships across a wide range of topics, including the human dimensions of global environmental change and the development and application of geographic information systems. The Institute fosters interdisciplinary, team-based research that engages graduate students and research faculty in problem formulation and resolution.

The Center for Community-Based

Development - conducts research on community institutions, governance, gender, participation, devising partnerships, and resolving conflicts within and among neighborhood/community institutions.

Clark Labs for Cartographic Technology and

Geographic Systems - a world leader in the creation of GIS and imaging processing software, Clark labs provides affordable access to the frontiers of spatial analysis including Idrisi and CartaLinks.

Graduate Program

IDCE includes four graduate programs:

- **International Development and Social Change (ID)**
- **Community Development and Planning (CDP)**
- **Geographic Information Sciences for Development and Environment (GISDE)**
- **Environmental Science and Policy (ES&P)**

The IDCE Department stresses a cross-disciplinary approach linking geography, economics, government, history, anthropology, and the environmental sciences. IDCE/MA programs offer opportunities for present or future development professionals to move from entry-level positions to career-track opportunities. Each program requires ten courses as well as a final project, research paper or critical review paper. The GISDE Program may be taken either as an intensive 12-month sequence or be spread out over a longer time period; the ES&P, ID, and CDP programs normally take 18 to 24 months. To be eligible, a candidate needs a baccalaureate degree (or equivalent). Some field experience in overseas or domestic work related to environment and/or development is preferred.

International Development and Social Change (ID)

The master's degree in International Development and Social Change is designed for present and future practitioners in grass-roots and community-based development. Offering alternatives to centralized planning and implementation, the ID/MA program has been a pioneer in participatory development and a leading force to create tools for social change. For a quarter of a century, IDCE faculty have done critical work in community-based development in Africa, Asia, and Latin America. These experiences have reinforced their conviction that local participation is key to sustainable development. The IDCE participatory approach builds ownership on local levels and fosters partnerships between local institutions and external agencies.

Through action-oriented studies linking theory and practice, ID students learn to identify resources, organize information, help communities agree on priorities, and draft action plans. The program emphasizes grass-roots methods and tools in data gathering and assessment, gender analysis, program management, conflict negotiation, project design, monitoring, evaluation, participatory rural appraisal, and participatory action research. Course work introduces both alternative and traditional theories and provides practical skills to advance professional goals in development.

The ID master's degree prepares scholar/activists to work on the front lines of international development. Its unique blend of theory and practice enables development practitioners to link local planning and action to policy making at different levels. The program also focuses on gender issues and social justice-bridging differences in post-conflict areas, building alliances among institutions, and giving marginalized people a voice in development.

For more information, visit www.clarku.edu/departments/idce/id.

ID Courses of Study

The ID master's degree requires 10 courses. Of these, three are required, two are skill courses, and the remaining five are electives in the student's field of specialization. A final project, research paper or critical review paper completes degree requirements.

ID Required Core Courses

IDCE 360 Development Theory - examines development theories, issues, and practices emphasizing the evolution of ideas and the search for alternative approaches to development.

IDCE 314 Research Design and Methods - reviews topics in social research design and methodology including problem definition, research strategies, measurement, sampling, and data collection techniques and procedures.

IDCE 361 Development Programs and Project Management - explores relationships among development theory, project implementation, and management. Topics include project design, implementation, management, budget monitoring, scheduling, work plans, and evaluation.

ID Skill Course:

(A sampling: two required)

IDCE 310 Introduction to GIS

IDCE 388 GIS and Local Planning

IDCE 395 Participation and Environment

IDCE 371 Digital Image Processing

IDCE 305 Qualitative Research Methods

IDCE 324 Computers and Quantitative Methods

IDCE 357 Dynamic Environmental Modeling

IDCE 359 Humanitarian Assistance in Conflict/Post-Conflict Situations

IDCE 331 Risk Analysis and Management

IDCE 332 Environmental and Social Impacts Assessment

IDCE 366 Principles of Conflict Negotiation and Mediation

IDCE 367 Quantitative Modeling

IDCE 396 Advanced Topics in GIS

**Community Development
and Planning (CDP)**

The Community Development and Planning Program prepares individuals to take on the challenge of empowering local communities to develop effective strategies for identifying community goals and maximizing their assets. CDP students participate in field research and internships that allow them to learn directly from community members about their needs, resources, and priorities and how best to mobilize local action to improve neighborhood quality of life. CDP graduates have the expertise to channel private and public community development funds and programs to address local needs.

The Community Development and Planning Program builds practical and analytical skills such as data collecting and analysis, planning, conflict mediation, financial management, monitoring, and evaluation. CDP courses teach students to employ and to critique traditional and emerging community development strategies and tools. The CDP program also enables students to better understand the complex linkages between local action and the processes of policymaking at a variety of levels. Students learn to critically examine the complex roles and effectiveness of informal neighborhood organizations, banks, private developers, local nonprofits, and government agencies in community development.

All students must complete a practicum on a local issue, such as the economic impact of housing production or youth participation in urban secondary school reform. In the practicum, students participate on a research team with Worcester city departments and local community development organizations to help address important community issues. For example, students work with Worcester Education Partnership (WEP), a secondary school change initiative funded by a \$8-million grant from the Carnegie Corporation.

For more information, visit www.clarku.edu/departments/idce/degree/cdp.s.html.

CDP Course of Study

The CD Program requires a minimum of 10 graduate course units. This includes three core courses in community development, two skills courses, and five elective courses related to the student's particular interests. All students must complete an internship with a community organization selected to provide training in practical skills required for successful work after graduation. Students may be exempt from internships if they have had significant prior experience.

CDP Required Core Courses (3)

- IDCE 344 Community Development and Planning Theory
- IDCE 346 Practicum in Community Development and Planning
- IDCE 314 Research Design and Methods

**Community Development
Skill Courses (select two)**

- IDCE 310 Introduction to GIS
- IDCE 388 GIS and Local Planning
- IDCE 305 Qualitative Research Methods
- IDCE 324 Computers and Quantitative Methods
- IDCE 357 Research Seminar in Dynamic Environmental Modeling
- IDCE 359 Humanitarian Assistance in Conflict/Post-Conflict
- IDCE 331 Risk Analysis and Management
- IDCE 363 Decision Methods for Environmental Management
- IDCE 395 Participation and Environment
- IDCE 332 Environmental and Social Impacts Assessment
- IDCE 347 Globalization: Structure and Dynamics
- IDCE 366 Principles of Conflict Negotiation and Mediation
- IDCE 367 Quantitative Modeling
- IDCE 396 Advanced Topics in GIS

Practicum in Urban Development and Planning

The practicum provides the capstone experience for the MA. Each year the practicum will focus on a different local issue. Below is a brief description of a recent practicum offered in the spring semester:

Practicum I: The Economic Impact of Housing Production

Students in the practicum work with the City of Worcester Executive Office of Neighborhood Services Housing Department and two local community development corporations (CDC) to conduct an analysis of the economic and, to a lesser extent, the social impact of housing development in two low-income Worcester neighborhoods. Students examine the past eight years of housing production activities of the CDCs corresponding to the initiation of the federal HOME program. Variables such as taxes, utilities, and usage of local stores by residents of CDC-produced housing units will be examined to assess the direct economic impact of housing. Participation in community activities is also studied to understand the social impact of housing. Ripple effects, such as other neighbors doing home improvements, are also examined. Costs associated with rehabilitating and maintaining properties will be included to determine under what conditions housing costs outweigh economic benefits. These results can be used to lobby funders to include housing development in low-income communities as an economic development tool.

Practicum II: Youth Participation in Urban Secondary Schools Reform

Community development students in this practicum have worked on the Worcester Education Partnership (WEP), a secondary school change initiative funded by the Carnegie Corporation of New York. Graduate students worked as a research team on the WEP to examine the student perspective on school change. They used focus groups, interviews, meeting transcripts, and other forms of secondary data to determine students' educa-

tional priorities. Practicum students analyzed how the student perspective complemented and/or contradicted teacher, school administrator, and parent views on education. Students produced several reports and presented their findings and recommendations to the Worcester Public Schools senior management team, teachers, and community members.

CDP Internships

Each student must complete an internship with a community organization. These internships will be selected to provide training in practical skills.

Examples of Community Development Internships:

- Worcester's Neighborhood Cabinet. Interns synthesize and analyze individual neighborhood planning documents. They interview resident leaders on neighborhood development activities relative to the planning documents and produce a report of findings.
- Worcester Community Housing Resources. Students work in one of the key areas of this nonprofit housing development and lending organization (e.g. property development, property management, financial development).
- Central Massachusetts Regional Planning Commission. Students assess local compliance of federal environmental justice legislation with the opportunity to use GIS in practical setting.
- Oak Hill Community Development Corporation. Students work in one of the key areas of this CDC (e.g. community outreach, workforce development, property development, property management).

City of Worcester Executive Office of Neighborhood Services-Housing Department. Interns assist the Director of Housing in creating a housing database, in developing a user-friendly website with housing documents and policies, and research local, state, and federal housing grant procedures.

Geographic Information Sciences for Development and Environment (GISDE)

The master of arts degree in Geographic Information Science for Development and Environment (GISDE) is designed for practitioners in development, conservation, and environmental management who wish to enhance their skills and knowledge in GIS applications. Sponsored jointly by the Graduate School of Geography and Department of International Development, Community, and Environment, the MA degree is equally suited for professionals re-entering the job market and those seeking GIS experience to strengthen their existing careers. Studies focus on applications of GIS skills to spatial analysis for development and environment in industrial and developing regions.

The program emphasizes building the intellectual breadth required to understand development issues and the technical depth required for GIS analysis. Clark is home to Idrisi, the most widely used raster GIS software in the world, so students are exposed to state-of-the-art software modules. IDCE's Program in International Development has been a leading force for creating tools of gender analysis and participation in domestic and international development. The combination of GIS with IDCE's expertise in international development, environmental risk, and hazards management make this MA program truly unique.

An additional benefit is student opportunities for collaborative research with faculty. GISDE students are working with faculty on the HERO project, a multi-year grant from the National Science Foundation focusing on water quality, land-use change and global climate change.

For more information, visit www.clarku.edu/departments/idce/degree/gis.

GISDE Course of Study

The Master of Arts degree in Geographic Information Sciences for Development and Environment involves ten courses: three required courses as well as seven electives that

focus on issues of environment and/or development. The required courses are: Advanced Topics in GIS, a core seminar that considers applications of GIS to environment and development, and one research seminar. At least one elective must be a skill course in a technical field, and at least one elective must be a policy course in related social sciences. The GISDE program culminates in a project that utilizes GIS tools to analyze a problem in environment or development.

GISDE Required Core Courses (3)

Prerequisite: Proficiency in GIS - either demonstrated in a one-week workshop in August or through IDCE 310, Introduction to GIS - fall semester

IDCE 391 GISDE Seminar - fall semester

IDCE 394 GISDE Seminar - taken the semester of graduation

IDCE 396 Advanced Topics in GIS - spring semester. Considers newest theories and applications in GIS including geodesy, change & time series analysis, uncertainty, and multi-criteria decision making.

GISDE Skill Courses (select two)

Skill Electives (at least one chosen from technical fields, such as):

IDCE 388 *GIS and Local Planning*

IDCE 371 *Digital Image Processing*

IDCE 324 *Computer and Quantitative Methods*

IDCE 385 Research Themes in GIS

IDCE 314 Research Design and Methods

IDCE 367 Quantitative Modeling

IDCE 349 Spatial Analysis

IDCE 310 Introduction to GIS

IDCE 363 Decision Methods for

Environmental Policy and Analysis

IDCE 331 Risk Analysis and Management

IDCE 332 Environmental and Social Impacts Assessment

IDCE 356 Integrated Natural Resources Management

[Note: *Italics* means highly recommended.]

GISDE Tracks

There are two GISDE tracks: students may choose to complete their degrees in 12 months or in three semesters. The 12-month track consists of four courses in the fall semester, four in the spring semester and two in the summer. The two summer courses are IDCE 393 and IDCE 394.

The three-semester GISDE track allows any combination of electives, as long as 10 courses are completed, including the three required GISDE courses.

Student Projects

Each student completes a project in which an aspect of GIS analysis is applied to a problem in environment and/or development. Work begins on the project during the IDCE 391 seminar in the fall and continues in the IDCE 394 seminar during the semester of graduation. For the 12-month track, the analysis and final summation are carried out in the summer with formal presentations in August. For the three-semester track, project presentation is in December.

Three of the GISDE, seminars IDCE 392, 393, and 394, are research courses in which students work one-on-one with their research advisor on their final GIS project. These seminars are offered every semester.

The Environmental Science and Policy Program (ES&P)

Effective environmental management in the 21st century requires not only an understanding of natural processes, but also of how we interact with our natural environment, how we work with other stakeholders to make policy, and how we apply technologies. The master's degree in Environmental Science and Policy trains individuals to play a vital role in bridging the gaps between ideas, interests, disciplines, and cultures.

ES&P graduates become cross-disciplinary professionals, able to apply natural and social science knowledge to policy making and technology choices in developed and developing countries. They work with and between stake-

holders to understand environment-development problems, plan solutions, and implement innovative strategies that are flexible, cost-effective, and sustainable.

The ES&P master's program develops students' abilities to integrate the natural and social sciences in areas such as: natural resources management, risk analysis and management, and environmental and social impacts assessment of technology choices.

At Clark, graduate ES&P students benefit from stimulating opportunities:

- To interact with risks/hazards scholars at the world-renowned George Perkins Marsh Institute;
- To link GIS with environmental decision making in the U.S. and abroad;
- To work with innovators of sustainable resource management strategies;
- To learn community-based participatory approaches from field practitioners;
- To spearhead integrated capacity building approaches to sustainability;
- To interact with graduate students from around the globe.

Clark University's interdisciplinary master's degree in Environmental Science and Policy prepares students to find creative approaches to the complex issues relating to sustainable management of Earth's environmental resources. See www.clarku.edu/departments/idce/environmentalscience.

ES&P Course of Study

To be eligible for the ES&P master's degree program, a candidate needs a baccalaureate degree (or equivalent). Domestic or overseas field experience related to environmental issues is desirable.

Graduates in all fields are welcome, but preference is given to candidates who have proficiency in one or two areas from the following two groups:

- 1) Basic and/or applied natural science or engineering (e.g. anthropology, biology, chemistry, computer science, ecology,

engineering disciplines, environmental science, epidemiology, geology, mathematics, geography, physics, statistics, toxicology), preferably with some social science or policy studies, or

- 2) Basic and/or applied social science (e.g. economics, international development, international relations, management, political science, psychology, sociology) with good quantitative skills and preferably some natural science

Then courses are necessary to complete the master's degree in Environmental Science and Policy: three required core courses, two skills courses, and five elective courses in the student's particular environmental interest.

Students with a strong interest in independent research are encouraged to complete a master's thesis (two credits) or a critical review paper (one credit), based on research participation with ES&P or an approved affiliated faculty. Both options culminate in an oral presentation.

ES&P graduate students can enroll in courses in other departments as approved by the graduate program advisor.

ES&P Required Courses (3)

Core courses provide ES&P graduate students with a common academic experience and background knowledge. The three required ES&P core courses are:

- IDCE 30287 Fundamental Environmental Science and Engineering
- IDCE 363 Decision Methods for Environmental Management and Policy
- IDCE 382 Management of Environmental Pollutants

ES&P Skills Courses (2)

Students, in consultation with the graduate advisor, must select two skills courses from IDCE course offerings. This skills list includes, but is not limited to:

- IDCE 324 Computer and Quantitative Methods in Risk Analysis
- IDCE 352 Technology and Environmental Assessment
- IDCE 357 Dynamic Environmental

Modeling

- IDCE 331 Risk Analysis and Management
- IDCE 332 Environmental and Social Impacts Assessment
- IDCE 349 Advanced Topics in Spatial Analysis
- IDCE 362 Physico-chemical Pollution Modeling
- IDCE 391 GIS for Development and Environment
- IDCE 310 Introduction to GIS
- IDCE 329 Management of Arid Lands
- IDCE 372 Groundwater Hydrology and Management
- IDCE 371 Digital Image Processing
- IDCE 388 GIS and Local Planning
- IDCE 396 Advanced Topics in GIS
- IDCE 305 Qualitative Research Methods
- IDCE 367 Quantitative Modeling
- IDCE 395 Participation and Environment
- IDCE 366 Principles of Negotiation and Mediation

IDCE Courses

300 SOCIAL ANALYSIS AND ACTION - NORTH AND SOUTH/SEMINAR

Focuses on a critical concern for this century—the enduring inequalities that plague much of the world's population. With the scale of human poverty increasing, discrimination in all forms—whatever their basis—bear close examination. This course in social relations analysis explores the patterns and trends creating and maintaining disadvantage; it identifies approaches to social impact assessment (SIA), and enables students to work in teams to assess the structures, processes and politics of disadvantage in a specific social system.

Staff/Offered every other year

303 CULTURE, CONSUMPTION AND CLASS IN LOCAL AND GLOBAL CONTEXTS/LECTURE, DISCUSSION

See Sociology 250. Ms. Bhachu/Offered every other year

304 SEMINAR ON WATERSHED

ECOLOGY/SEMINAR

Examines the current scientific literature on the functional ecology and biogeochemistry of contrasting terrestrial ecosystems. Topics covered include the inputs, outputs, and internal transfers of water and nutrients in temperate hardwood forests, pine barrens, tropical rain-forests, montane cloud forests, eucalypt woodlands, and arid environments. The processes of rock weathering, leaching from above-ground vegetative surfaces, nutrient uptake by plants, atmospheric inputs, and stream discharge of nutrients are emphasized. The Hubbard Brook ecosystem study is considered in detail with a field trip to the Hubbard Brook experimental watershed in the White Mountains. Staff/Offered every other year

305 QUALITATIVE RESEARCH METHODS: SKILLS AND APPLICATIONS/LECTURE, DISCUSSION

See ID 255. Ms. Rocheleau/Offered every year

306 GLOBAL ECONOMIC GEOGRAPHIES/LECTURE, DISCUSSION

See Geography 256. Ms. Aoyama/Offered every other year

307 DEVELOPMENT AND REGIONAL INTEGRATION/SEMINAR

See ID 258. Staff/Offered periodically

308 COMPARATIVE POLITICS OF WOMEN/LECTURE, DISCUSSION

See Government 208. Ms. Enloe/Offered every other year

309 ROOTS AND ROUTES: IMMIGRANTS, DIASPORAS AND TRAVEL/LECTURE, DISCUSSION

See Sociology 260. Ms. Bhachu/Offered every year

310 INTRODUCTION TO GIS/LECTURE, DISCUSSION

Introduces GIS as a data management, analysis, and mapping tool. Stresses fundamental logic and scope of problem solving using raster and vector systems. Although the course is computer-oriented, no programming is involved. A formal analysis (FA) course. Counts as a skills course or core course in Mapping Sciences/Spatial Analysis in geography major. Mr. Marcano/Offered every semester

311 AFRICAN ENVIRONMENTS AND GEOGRAPHICAL IMPLICATIONS/LECTURE, DISCUSSION

See Geography 211. Mr. Lewis/Offered periodically

312 FAMINE AND FOOD SECURITY/LECTURE, DISCUSSION

See ID 262. Ms. Hammond/Offered periodically

313 LATIN-AMERICAN POLITICS/LECTURE, DISCUSSION

An introduction and an overview of the key economic and political issues confronting Latin America today: economic development and social inequality, international debt, the breakdown of democracies as well as transitions from authoritarian rule, revolutions, and the role of working-class, women's, peasant, and ethnic movements. We will draw on the analytical perspectives of political economy and cultural politics to develop a nuanced and self-reflexive understanding of the complex realities of Latin-American politics. Ms. Asher/Offered periodically

314 RESEARCH DESIGN AND METHODS/SEMINAR

Covers major topics in empirical social research design and methodology: problem definition, research strategies, measurement, sampling, data collection techniques and procedures, and proposal writing. Staff/ Offered every year

317 ADVANCED TOPICS IN INTERNATIONAL RELATIONS

See ID 293. Staff/Offered every year

318 SEMINAR IN PHYSICAL ENVIRONMENT AND DEVELOPMENT/SEMINAR

The world is changing more rapidly than at any time in history. This course reviews patterns of change in the Third World and examines the role of environment and resource management in development. In-depth case studies are developed. Permission of instructor required. Mr. Lewis/Offered every other year

319 THE POLITICS OF LAND: KENYA, ZIMBABWE, AND SOUTH AFRICA/SEMINAR

See Government 219. Ms. Grier/Offered every other year

320 CHILD LABOR AND THE STATE: COMPARATIVE PERSPECTIVES/SEMINAR

See Government 218. Ms. Grier/Offered every year

321 THE FRENCH-SPEAKING WORLD/LECTURE, DISCUSSION

See ID 249. Ms. Kaufmann/Offered periodically

324 COMPUTER AND QUANTITATIVE METHODS IN RISK ANALYSIS/LECTURE, LABORATORY

See EN 247. Mr. Ratick/Offered every other year

325 AFRICAN-AMERICAN POLITICS/LECTURE, DISCUSSION

See Government 224. Ms. Grier/Offered every other year

326 GLOBAL POLITICS OF DEVELOPMENT/LECTURE, DISCUSSION

See Government 227. Staff/Offered periodically

327 COMPARATIVE POLITICS OF RACE, ETHNICITY, AND GENDER/LECTURE, DISCUSSION

See Government 228. Ms. Enloe/Offered every other year

328 ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION

See Econ 228. Mr. Hsu/Offered every other year

329 MANAGEMENT OF ARID LANDS/LECTURE, SEMINAR

See Geography 229. Mr. Johnson/Offered every other year

330 SEMINAR IN CULTURAL AND POLITICAL ECOLOGY/SEMINAR

See Geography 330. Mr. Johnson, Mr. Turner/Offered periodically

331 RISK ANALYSIS AND MANAGEMENT/SEMINAR

Draws together disparate theories and methods for risk analysis of health, environmental, and technological problems. Includes dose-response calculations, exposure assessment, modeling, fault-tree analysis, uncertainty, and risk communication. Covers intermediate statistics, Monte Carlo methods, and forecast evaluation. Developed and developing country case studies will be compared. Mr. Downs/Offered every year

332 ENVIRONMENTAL IMPACT ASSESSMENT (EIA)/SEMINAR

Covers environmental and social impacts assessment in the U.S. and developing countries. For the U.S. context, explains basic documents, required processing, and agency and public involvement. Categories of impacts include socio-economic impact, land use, water, air, cultural/historic resources, wetlands, and wildlife. In developing countries, EIA is often required to grant loans for development. We discuss appropriate methodologies, case studies and cultural contexts. Mr. Downs/Offered every other year

333 POPULATION, ENVIRONMENT, AND DEVELOPMENT/VARIABLE FORMAT

See Sociology 232. Mr. London, Ms. Merrill/Offered periodically

334 TOPOGRAPHICAL MAPPING/SEMINAR

See Geography 296. Mr. Steward/Offered every year

335 POLITICS OF VIETNAM AND THE PHILLIPINES/LECTURE, DISCUSSION

See Government 236. Ms. Enloe/Offered every other year

336 CITIES AND CULTURE: THE EUROPEAN CITY/LECTURE

See Geography 242. Mr. Bowden/Offered every other year

337 CULTURE, POLITICS, AND INTERNATIONAL DEVELOPMENT/LECTURE, DISCUSSION

See ID 245. Mr. Fisher/Offered periodically

339 COUNTRY AND CULTURE/LECTURE, DISCUSSION

See Geography 239. Offered every other year

340 HUMAN RIGHTS AND INTERNATIONAL POLITICS/LECTURE, DISCUSSION

See ID 240. Staff/Offered periodically

342 SEMINAR IN LAND USE/COVER CHANGE/SEMINAR

Examines land-use/cover change as the foundation for global change, environmental change, and sustainability science, and as the "human-environment" geographic subfield of these sciences. Topics addressed: international agendas, use-cover change globally and regionally, prox-

imate and distal causes of change, theories of change, and spatially explicit modeling of change. Mr. Turner/Offered periodically

343 SEMINAR IN HUMAN DIMENSIONS OF GLOBAL CHANGE/SEMINAR

Explores societal responses to and management of global environmental change. Major topics to be addressed are: societal response pools, adaptation vs. adjustment, surprise, vulnerability analysis, policy analysis, social learning, and regime theory. Staff/Offered periodically

344 LOCAL COMMUNITY DEVELOPMENT AND PLANNING THEORY/SEMINAR

Engages students in the various theories, debates, and strategies regarding the development of urban communities. Students analyze and critique traditional and emerging community development frameworks, strategies, and tools. Local community development practitioners present a "field perspective." Required for Community Development and Planning Track. Ms. Ross/ Offered every year

346 PRACTICUM IN COMMUNITY DEVELOPMENT AND PLANNING

Engages students to work as a team on a critical community development project. Students gain skills in field research, applied qualitative and quantitative data analysis, multi-disciplinary teamwork, negotiation with clients, and writing professional reports. Practicum clients and topics have included a project with the Worcester Public Schools to involve public school students in urban secondary school reform and work with the City of Worcester and two community development corporations on assessing the economic impact of housing production in low-income neighborhoods. Ms. Ross/Offered every year

347 GLOBALIZATION: STRUCTURES AND DYNAMICS/SEMINAR

See Sociology 288. Mr. Ross/Offered periodically

349 ADVANCED TOPICS IN SPATIAL ANALYSIS/SEMINAR

Explores spatial statistics and spatial decision models. The spatial statistics part of the course focuses on point, block and global estimation,

fitting variogram models, kriging, and spatial simulation. The prescriptive modeling part will focus on location/allocation-based decisions models including private and public sector facility location problems and land allocation models. The topics covered are closely linked to the underlying spatial analytic methodologies used in, and often illuminated by examples developed with, Geographic Information Systems (GIS). The spatial statistics module in the Idrisi GIS will be used. Runs on the "Socratic" method with some high-tech twists. Students are assigned a topic per week to prepare material and lead discussion. Pass/fail. Grading is based on class participation.. Mr. Ratick/Offered every semester

352 TECHNOLOGY AND ENVIRONMENTAL ASSESSMENT/SEMINAR

A survey of analytic techniques used in evaluating environmental conditions and the impacts of technology. These techniques consist of formal methods such as cost-benefit, risk-benefit, cost-effectiveness, and decision analysis. They also include methods used to elicit human judgment and behavioral responses in evaluating complex environmental and technical systems. Draws on case studies and teaches students to make both quantitative and qualitative assessments. Mr. Ratick/Offered every year

353 INTERNATIONAL POLITICAL ECOLOGY/LECTURE, DISCUSSION

See Geography 353. Ms. Rocheleau/Offered every other year

354 THIRD-WORLD WOMEN AND GENDER IN ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION

How did "third-world women" and "gender" concerns enter economic development discourses? How have "third-world women" and "gender" been conceptualized within development practices? In turn, how have feminist theories about women and gender shaped economic development discourses? In exploring these issues, this graduate seminar will eschew the divide between "theory" and "praxis" that plagues development literature. Ms. Asher/Offered every year

355 SOCIAL FORESTRY, AGRO ECOLOGY AND DEVELOPMENT/SEMINAR

Considers importance of trees and forests to social and ecological well-being of people, emphasizing interests of rural people in Africa, Asia, and Latin America. Examines forest resources as a growing focus of political and economic action at local, national, and international levels. Concentrates on case-study examples of technical and policy innovations in social forestry and agroforestry.

Mr. Rocheleau/Offered every other year

356 INTEGRATED NATURAL RESOURCE MANAGEMENT (IRM) SEMINAR

We use a watershed approach for the co-management of resources: air, water, soil, land, forests and wildlife. Integrated approaches require the collaboration of diverse interests to identify priorities and choose best management options. Case studies from developed and developing countries are compared. Physical science and social science concepts are brought together to analyze and solve resource management and challenges. Mr. Downs/Offered every year

357 RESEARCH SEMINAR IN DYNAMIC ENVIRONMENTAL MODELING/LECTURE, DISCUSSION

See EN 256. Mr. Goble/Offered every other year

358 ADVANCED TOPICS FOR INTERNATIONAL DEVELOPMENT/SEMINAR

Staff/Offered periodically

359 HUMANITARIAN ASSISTANCE IN CONFLICT/POST-CONFLICT SITUATIONS/SEMINAR

In developing countries, conflict is often primarily a result of competition over access to scarce resources. Attempts to improve people's access to resources can have both constructive and harmful implications for reconciliation and peace-building processes. Interpersonal and inter-group tensions can impact the design and delivery of assistance long after the violence has ended. This course will explore the intricacies of providing humanitarian and development assistance in conflict and post-conflict situations. It will examine the practi-

cal aspects of working in conflict zones and of providing assistance to people who have been affected by war: the displaced, victims of violence, the traumatized, and others who live in environments made insecure by conflict.

Ms. Hammond/Offered every year

360 DEVELOPMENT THEORY

A graduate seminar examining development theory, relating theory, issues, and practice with an emphasis on the evolution of ideas and the search for alternative approaches to development interventions. Ms. Ashet/Offered every year

361 DEVELOPMENT PROGRAMS AND PROJECT MANAGEMENT/SEMINAR

Explores relationships between development theory and project implementation and issues of program and project management. Topics include project design, implementation, management, budget monitoring, scheduling, and evaluation. Focuses on problem identification, developing project proposals, designing environmental and social impact assessments, and creating evaluation frameworks. Emphasizes case studies. Mr. Fisher/ Offered every year

362 PHYSICO-CHEMICAL POLLUTION MODELING/SEMINAR

Provides simple techniques for estimating how chemicals will distribute in environmental media (air, water, soil and biota), where they accumulate, how long they persist, and how this leads to human exposure. Gives examples of simple calculations, includes links to Web sites for models and access to chemical data. Instead of just focusing on specific compartments, such as the atmosphere, or specific substances, such as PCBs, this course presents the bigger picture of how organic chemicals behave in our total environment. Mr. Downs/ Offered every other year

363 DECISION METHODS FOR ENVIRONMENTAL MANAGEMENT AND POLICY/LECTURE, DISCUSSION

Information on environmental impact assessments needs to be systematically organized and analyzed to be useful in the decision-making process. This course provides a survey of methods that are currently used to aid environmen-

tal makers (who include policy makers, environmental managers, and affected populations). Covers techniques such as: decision analysis, benefit/cost analysis, multi-criteria evaluation, multi-objective analysis, multi-attribute utility theory, the analytical hierarchy process, and spatial analytical methods using geographical information systems. These methods will be evaluated with respect to their theoretical foundations, systems formulation, and appropriate application. A critical evaluation of the strengths and weaknesses of these methods will also be discussed. Mr. Ratick/Offered every year

364 SEMINAR ON MONITORING AND EVALUATION DEVELOPMENT PROJECTS

Reviews the growing literature relating to the theory and methods of evaluation to learn from mistakes of past development projects in order to design more effective ones in the future. Participants think through the implications of the review in evaluating development projects of their own choice. Staff/Offered periodically

365 GRADUATE SEMINAR IN ECONOMIC GEOGRAPHY/SEMINAR

See Geography 365. Ms. Aoyama/Offered every year

366 PRINCIPLES OF NEGOTIATION AND MEDIATION: AN OVERVIEW OF CONFLICT RESOLUTION APPROACHES

Offers an overview of the principles of conflict resolution that can be applied internationally as well as interpersonally. A general framework for the understanding of conflict is presented that includes: power-based, needs-based, interest-based, and the relationship-based conceptualizations of conflict resolution. Gives students a theoretical as well as practical experience of conflict. It explores some of the psychological obstacles that impede the resolution process and engages in a number of experiential exercises that help the student develop the interpersonal skills needed to transform conflict relationships. Ms. Hicks/Offered every year

367 QUANTITATIVE MODELING/LECTURE, DISCUSSION, LABS

See ID 260. Mr. Pontius. Offered every year

368 SEMINAR IN CARTOGRAPHY/SEMINAR

See Geography 294. Staff/Offered periodically

369 RELIGION, IDENTITY, AND VIOLENCE IN A GLOBALIZING WORLD/LECTURE, DISCUSSION

Examines the nature of religion and the interconnections among religious identity, political violence, and globalization in the contemporary world. It will examine conflicts that arise between groups with different religious identities as well as conflicts between religions and secularization. It will consider how globalization has failed to satisfy so many people in the world, why religion has been raised as an alternative, and why the religious rejection of secularization has been so violent. Mr. Fisher/Offered periodically

370 ANIMAL AGRICULTURE/LECTURE, DISCUSSION

See Geography 370. Mr. Johnson/Offered every other year

371 DIGITAL IMAGE PROCESSING/LECTURE, LABORATORY

See Geography 293. Mr. Eastman/Offered every year

372 GROUNDWATER HYDROLOGY AND MANAGEMENT/LECTURE, DISCUSSION

See EN 271. Ms. Emel/Offered every other year

373 SOCIAL MOVEMENT, GLOBALIZATION, AND THE STATE/LECTURE, DISCUSSION

See ID 253. Mr. Fisher/Offered every year

374 ADVANCED TOPICS IN COMPARATIVE POLITICS/SEMINAR

See Government 286. Ms. Enloe, Ms. Grier, Ms. Sperling/Offered every year

375 GENDER AND GLOBAL CHANGE/LECTURE, DISCUSSION

Explores gender as a variable shaping people's roles, responsibilities, obligations, and opportunities across cultures and nations, with particular attention to Third World societies; analyzes transformations taking place in gender roles, relations, et al, in the process of globalization; and clarifies approaches and identifies tools for socio-economic and gender analysis in the con-

text of participatory research and community empowerment. The course focuses on theoretical questions and policy issues, explores methods of gender analysis for research, and considers gender-sensitive strategies for alleviating poverty, generating income, and empowering disadvantaged social groups. Staff/Offered every other year

376 FIELD SAMPLING METHODS

See ID 276. Mr. Marcano/Offered every year

377 GENDER, ENVIRONMENT AND DEVELOPMENT/SEMINAR

See ID 277. Ms. Rocheleau/Offered every year

378 THE CREATION OF NATIONALISM, NATIONALIST CULTURES, AND SYMBOLS/LECTURE, DISCUSSION

See Sociology 255. Staff/Offered every year

379 TWENTIETH-CENTURY LATIN AMERICA/PROSEMINAR

See History 275. Ms. Roazen/Offered periodically

380 URBAN ECOLOGY: CITIES AS ECOSYSTEMS/LECTURE, DISCUSSION

See Geography 280. Ms. Rocheleau/Offered periodically

381 POLITICS AND POWER IN THIRD-WORLD SOCIETIES/LECTURE, DISCUSSION

Examines the evolving nation-state in the Third World, connections between colonialism and Third World political patterns, the interaction between politics and internal economic and social forces, as well as the political impact of ideologies. Analyzes the politics of such groups as the landless; urban poor; women; and ethnic, religious, clan, or caste groups. Examines patron-client relations, political parties, self-help associations, and peasant mass movements for their roles in socio-economic and political change. Staff/Offered periodically

382 MANAGEMENT OF ENVIRONMENTAL POLLUTANTS/SEMINAR

Studies approaches to regulating hazardous chemicals in air, water, and food. The course is built around the three general types of interventions that have been practiced by the regulatory agencies over the last three decades:

shifting to safer technologies; issuing licenses to pollute in the form of industrial emission permits; and setting standards for air, water, and food contaminants. The scientific controversies in setting standards and issuing permits are presented vis-a-vis the legislative mandates, the need for benefit-cost accounting, and the scientific uncertainty. The strengths and weaknesses of command-and-control system versus the incentive-based system with regard to industrial enterprises are also discussed. Emphasizes recent efforts to decrease government involvement in corporate environmental management and to shift towards an incentive-based regulatory system. While focus is on public policies in the United States, international comparisons with Western European and Eastern European countries are included. The course has a seminar format, with weekly student presentations and class discussions. Ms. Brown/Offered every year

383 TROPICAL ECOLOGY/LECTURE, DISCUSSION

See ID 283. Ms. Rocheleau/Offered every other year

384 ENVIRONMENT AND DEVELOPMENT IN THE MIDDLE EAST

See Geography 284. Mr. Johnson/Offered every other year

385 RESEARCH THEMES IN GIS/LECTURE, DISCUSSION

See Geography 389. Mr. Eastman/Offered every year

386 ADVANCED TOPICS IN COMPARATIVE POLITICS/SEMINAR

See Government 286. Ms. Enloe, Ms. Grier/Offered every year

388 GIS AND LOCAL PLANNING/SEMINAR, PROJECT

See ID 296. Mr. Marcano/Offered every semester

389 ADVANCED DEVELOPMENT THEORY/SEMINAR

A research seminar for students with backgrounds in development theory. Examines recent tendencies in development, focussing on the rise of neoliberalism as a hegemonic discourse. Critically examines shifts in World

Bank thinking from basic needs to export orientation. The seminar uses recent changes in post-Apartheid South Africa as a case study. Mr. Peet/Offered every year

390 THESIS RESEARCH/THESIS OPTION

Master's degree candidates may register while working on research for their thesis or published paper. Staff/Offered every year

391-394 GIS FOR DEVELOPMENT AND ENVIRONMENT/SEMINAR

Required for M.A. in GIS for Development and Environment. The Fall seminar is open to all students interested in GIS for international development. The Spring session is restricted to GISDE M.A. students and focuses on the research project. The two summer sessions are dedicated to project completion and presentation. Mr. Pontius/Offered every semester

395 PARTICIPATION AND ENVIRONMENTAL MANAGEMENT/LECTURE, DISCUSSION

See ID 297. Staff/Offered every year

396 ADVANCED TOPICS GIS/LECTURE, LABORATORY

Covers major research and application issues in GIS. Topics include geodesy, projections, change and time series analysis, error sources, assessment and propagation, analysis under conditions of uncertainty, and multi-criteria and multi-objective decision making. Prerequisite: Geography 190 and permission of instructor. Mr. Eastman/Offered every year

398 INTERNSHIP/FIELD WORK

Graduate students may elect to take graduate credit for extended internships. Permission of instructor. Contact the IDCE Office for internship proposal forms. Staff/Offered every semester

399 INDEPENDENT STUDY

Staff/Offered every semester

30210 ENVIRONMENT AND SOCIETY

See EN210. Staff/Offered every year

30216 ECOLOGY

See EN 216. Mr. Livdahl/Offered every year

30241 ENVIRONMENTAL TOXICOLOGY

See EN 241. Ms. Brown/Offered every other year

30246 CANCER: SCIENCE AND SOCIETY

See EN 246. Ms. Brown/Offered every year

30251 LIMITS OF THE EARTH/SEMINAR

Examines a variety of perspectives on the global environment and economic development, such as the biological concept of carrying capacity and economic concepts of growth. Topics covered include population growth, food production, energy and other resources, and critical chemical cycles. Attention is paid to the national and international institutions which set policies on these issues. Central to the course is a critical analysis of concepts of "sustainable development." The course is conducted as a seminar and also emphasizes quantitative tools in data analysis and systems modeling. Mr. Goble/Offered every year

30252 CORPORATE ENVIRONMENTAL MANAGEMENT

See Management 252. Mr. Sarkis/Offered periodically

30276 ENVIRONMENTAL LAW

See EN 276 Staff/Offered every year

30286 SUSTAINABILITY, INSTITUTIONS AND POLICY MAKING

See EN 286. Ms. Brown/Offered every year

30287 FUNDAMENTALS OF ENVIRONMENTAL SCIENCE AND ENGINEERING/SEMINAR

Covers key scientific and technical topics and emphasizes quantitative skills of problem solving. Topic areas include: mass and energy transfer, mathematics of growth, water pollution, water quality control, air pollution, global atmospheric change, and solid waste management. The course aims to provide a solid foundation in important scientific aspects of environmental problems, complementing courses with a joint science-policy orientation, or more policy-oriented courses. Seminar includes a one-hour lab for problem solving. Mr. Downs/Offered every year

30288 APPLIED ECOLOGY

Staff/Offered every year

MANAGEMENT

Faculty

Edward J. Ottensmeyer, Ph.D., dean: *strategic management, philosophy and business*

Margarete Arndt, D.B.A.: *management of health care organizations, clinical practice patterns*

John Baron, M.B.A., M.S.: *electronic commerce, process languages, performance evolution*

Barbara Bigelow, Ph.D.: *strategic management in health care facilities, corporate political strategy*

Mary-Ellen Boyle, Ph.D.: *business and society, managing change*

Robert C. Bradbury, Ph.D.: *health policy, health services research*

Gary Chaison, Ph.D.: *union structure, government and growth; comparative industrial relations; collective bargaining*

Keith Coulter, Ph.D.: *marketing management, marketing strategy, consumer behavior*

Dileep G. Dhavale, Ph.D., C.P.A., C.P.I.M.: *financial and managerial accounting*

Priscilla Elsass, Ph.D.: *organizational behavior, organizational theory*

Michael Fenollosa, Ph.D.: *financial management, investments, international finance*

Donna Gallo, Ph.D.: *strategic management, global strategic management*

Laura M. Graves, Ph.D.: *employee recruitment and selection, managing diversity in organizations*

Carlos Rodriguez, Ph.D.: *business to business marketing, new product development and technology*

Joseph Sarkis, Ph.D.: *operations management, environmentally conscious business practices*

Inshik Seol, Ph.D.: *accounting, financial and managerial accounting*

Richard B. Spurgin, Ph.D.: *derivative securities, stock futures and bond options*

R. P. Sundarraj, Ph.D.: *management information systems, database design*

Maurry Tamarkin, Ph.D.: *financial management, corporate finance*

Adjunct Faculty

Caroline Chiccarelli, Ph.D.

John L. Crawley, M.S., J.D.

Jane Gilligan, M.A.

Michael Holbrook, M.B.A.

Irene Houle, M.B.A.

Gerald McCarthy, Ph.D.

Thomas P. Millott, J.D.

Saeed Mohaghegh, M.B.A.

William Mosher, M.A.

John Rainey, M.B.A.

Dan Sullivan, M.B.A.

Kristi Thompson, M.B.A.

James Vozekas

Dennis Wadsworth, M.B.A.

Russell Wass, M.S.M.

Emeriti

Harold T. Moody, Ph.D.

Undergraduate Programs in Management

The Graduate School of Management offers four programs for undergraduates: the undergraduate major, the undergraduate minor, the five-year B.A./M.B.A. program, and the five-year B.A./M.S.F. program. Interested students should contact the assistant dean for academic affairs in the Graduate School of Management. Students should refer to the Graduate School of Management catalog for additional information on the M.B.A. and M.S.F. programs.

Major in Management

The management major incorporates a variety of disciplines to form a program that is both practical and broadly educational. Required and optional courses include offerings from a number of academic departments. The undergraduate management major and the M.B.A. and M.S.F. programs are accredited by the AACSB-International —The Association to Advance Collegiate Schools of Business.

The required curriculum for management majors consists of 10 prerequisite courses taken during the freshman and sophomore years, and eight required courses taken during the junior and senior years. Students must have at least a 2.0 overall grade-point average to declare man-

agement as a major. Students must take courses in the management major for letter grades. A 2.0 cumulative grade-point average in the major courses is required for graduation. Management offers students a bachelor's degree with a professional emphasis, providing the prerequisites for job placement. Students interested in graduate study toward an M.B.A. or M.S.F. degree are encouraged to major in an area other than management and to consider one of the five-year programs.

Requirements for Management Majors

Prerequisite Courses:

Freshman/Sophomore Years

MATH 113 Mathematical Problem Solving
or MATH 120 Calculus I

ECON 010 Economics: A Comparative
Approach

ECON 011 Principles of Economics

ECON 160 Introduction to Statistical
Analysis or PSYC 105 Quantitative
Methods

Environmental requirement (one of the
following): EN 101, EN 224, EN 226, EN
251, EN 282, ES 121, ES 122, GOV 157,
ECON 155, ECON 157, ECON 257,
GEOG 014, MGMT 252*

MGMT 101 Principles of Accounting

MGMT 104 Introduction to Management
Information Systems

MGMT 170 Managerial Communications

MGMT 178 Business Law

MGMT 203 Management Accounting

(*MGMT 252 is a junior/senior course that
can be used either to meet the environmental
requirement or as a management elective [not
both].)

Required Courses:

Junior/Senior Years

MGMT 210 Management and Behavioral
Principles

MGMT 230 Marketing Management

MGMT 240 Corporate Finance

MGMT 250 Operations Management

MGMT 260 Business Policy

MGMT 262 Business Ethics

Two Management Electives

Undergraduate Minor in Management

Students whose primary interest is liberal arts, but who want exposure to business-related topics, should consider management as an undergraduate minor. The required curriculum for management minors consists of six prerequisite courses taken during the freshman and sophomore years, and four required courses taken during the junior and senior years. Students interested in graduate study toward an M.B.A. or M.S.F. degree are encouraged to minor in an area other than management and to consider one of the five-year programs.

Requirements for Management Minors

Prerequisite Courses:

Freshman/Sophomore Years

MATH 113 Mathematical Problem Solving
or MATH 120 Calculus I

ECON 010 Economics: A Comparative
Approach

ECON 011 Principles of Economics

ECON 160 Introduction to Statistical
Analysis or PSYC 105 Quantitative
Methods

MGMT 101 Principles of Accounting

MGMT 104 Introduction to Management
Information Systems

Required Courses:

Junior/Senior Years

MGMT 210 Management and Behavioral
Principles

MGMT 230 Marketing Management

MGMT 240 Corporate Finance

MGMT 250 Operations Management

Five-Year Programs

The Graduate School of Management offers undergraduate students an opportunity to earn a B.A. in a major, as well as an M.B.A. or M.S.F. degree. The program features:

1. An undergraduate major in any of the liberal arts disciplines at the University (management is not recommended as a major for this program);
2. Graduate courses, beginning in the senior year, leading to an M.B.A. or M.S.F. degree and helping students prepare for manage-

ment positions in business, government, and nonprofit organizations; and

3. A well-rounded education that combines an undergraduate liberal arts education with a master's degree; students can earn both degrees in five years.

The Program Courses

The five-year programs involve four sets of learning experiences:

1. Courses in departments, such as economics and mathematics, that provide tools needed for graduate study;
2. The possibility of spending the junior year abroad;
3. Graduate courses taken in the senior year; and
4. Completion of the M.B.A. or M.S.F. program during the fifth year.

Student Advising and Entrance into the Program

Students should plan their undergraduate courses carefully to complete the requirements for both their major and the M.B.A. or M.S.F. degree in the time available. The management school's assistant dean for academic affairs is available to advise students interested in either five-year program.

Admission occurs after the sophomore year, but before the beginning of the senior year. Students must apply to the Graduate School of Management for admission by April 15 of their junior year. As part of the application, students must submit transcripts of undergraduate academic work and take the G.M.A.T. (Graduate Management Admission Test) or G.R.E. for both programs.

Work Experience

Five-year students are encouraged to participate in internships, summer jobs, or other experiences as undergraduates for exposure to management issues and environments. The exposure improves a student's appreciation of graduate courses and enhances his or her credentials and qualifications for job placement. A graduate-level internship is required as part of the MBA and MSF degree programs.

Five-Year B.A./M.B.A. Program

Freshman/Sophomore Years

Undergraduate courses must be passed with a B- or better to waive any MBA requirement.

MATH 113 Mathematical Problem Solving
and/or MATH 120 Calculus I

Note: Math proficiency is an entrance requirement for the MBA/MSF programs. It is demonstrated in one of 3 ways:

- a quantitative score in the 70th percentile on the GMAT/GRE
- a quantitative score between the 50th and 70th percentile on the GMAT/GRE plus one undergraduate math course passed with a grade of B- or better
- two undergraduate math courses passed with a grade of B- or better

Optional Courses that can be used to waive some graduate-level classes:

ECON 160 Introduction to Statistical Analysis or PSYC 105 Quantitative Methods (waives STAT 4005)

MGMT 104 Introduction to M.I.S. (waives MIS 4501)

MGMT 178 Business Law (waives MGMT 4708)

MGMT 230 Marketing Management (waives MKT 4401)

MGMT 240 Corporate Finance (waives FIN 4201)

MGMT 250 Operations Management (waives OM 4601)

Junior Year

Apply to the program (deadline is April 15th). It is helpful, but not required, that students should have no more than 1 to 3 classes remaining for undergraduate degree requirements (i.e. perspective courses and requirements for major/minor) at the completion of Junior year so that 4-1/2 to 6 units of graduate-level courses can be taken in the Senior year.

Senior Year - Fall (3 units)

The following courses are recommended, although individual programs of study may vary.

MGMT 4301 Leading Teams (1/2 unit)

MGMT 4302 Thinking Strategically (1/2 unit)

ECON 4004 Management Economics
(1/2 unit)

MIS 4501 Management Information
Systems (1/2 unit)

MIS elective (1/2 unit)

MGMT 4305 Career Development
(1/2 unit free elective, required prior
to graduate internship)

Senior Year - Spring (3 units)

MGMT 4303 Designing Organizations
(1/2 unit)

MGMT 4304 Implementing Strategic
Change (1/2 unit)

ACCT 4100 Foundations of Accounting
(1 unit)

STAT 4005 Statistical Methods (1/2 unit)

STAT 4006 Management Decision Models
(1/2 unit)

5th-year (10 units)

FIN 4201 Financial Management
(1/2 unit)

FIN 5301 Stock & Bond Valuation or
FIN 5302 Quantitative Techniques for
Derivatives Valuation (1/2 unit)

MKT 4401 Marketing Management
(1/2 unit)

MKT 4402 Marketing Strategy &
Simulation (1/2 unit)

MGMT 4709 Business in Society
(1/2 unit)

OM 4601 Operations Management
(1/2 unit)

MGMT 4707 International Management
& Global Competition) (1/2 unit)

MGMT 4708 Contemporary Business Law
(1/2 unit)

Capstone (1)

3-4 units of electives in area of concentra-
tion

1 to 2 additional units of free electives to
complete 5-1/2 units of electives, includ-
ing MGMT 4305 Career Development
(if required)

Graduate Internship (required for those
who have less than 3-years work experi-
ence in the U.S.) (no academic credit)

Five-year B.S./M.S.F. Program

Freshman/Sophomore/Senior Years

ECON 160 Introduction to Statistical
Analysis or PSYC 105 Quantitative
Methods

ECON 010 Economics: A Comparative
Approach

ECON 011 Principles of Economics

MATH 120 Calculus I

MGMT 101 Financial Accounting

These 5 courses must be passed with a B- or
better to count toward the MSF pre-requisites.

Junior Year

Apply to the program (deadline is April 15th).

Senior Year

Complete undergraduate degree require-
ments

5th year (10 units)

FIN 5301 Stock & Bond Valuation
(1/2 unit)

FIN 5302 Quantitative Techniques for
Derivatives Valuation (1/2 unit)

FIN 5311 Portfolio Management (1/2 unit)

FIN 5309 Financial Econometrics
(1/2 unit)

FIN 5201 Case Studies in Corporate
Finance (1 unit)

FIN 5310 Case Studies in Derivatives
(1 unit)

FIN 5207 Advanced Derivatives (1 unit)

FIN 5208 Fixed Income Securities (1 unit)

FIN 5203 Investment Strategies (1 unit)

FIN 5281 Case Studies in International
Finance (1 unit)

Electives: 2 units of electives in Finance,
Accounting or Economics

Courses

101 PRINCIPLES OF ACCOUNTING/LECTURE, DISCUSSION

A "user-oriented" approach teaches students an
understanding of accounting information and
the environment in which it is developed and
used. Topics include: history of accounting,
accounting cycle, accounting for assets, liabili-
ties, and equity, and international accounting
issues. Staff/Offered every semester

104 INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS/LECTURE, DISCUSSION

Emphasizes basic knowledge needed to understand the field of information systems. Topics include information and organization, database management, recent developments in computer technology and their effect on management, and information systems design and management. Staff/Offered every semester

170 MANAGERIAL COMMUNICATIONS/LECTURE, DISCUSSION

Helps managers communicate with confidence by showing them how to prepare clear, concise memos, letters, reports, and proposals and deliver effective oral presentations. Through class participation and in-class writing exercises, students develop confidence in their ability to communicate. Prerequisite: successful completion of VE course. Staff/Offered every semester

178 BUSINESS LAW/LECTURE, DISCUSSION

Examines the legal framework in which U.S. businesses operate. Emphasizes areas of the law such as contract negotiation and provisions, the Uniform Commercial Code, government regulations, consumer protection, and tort liability. Provides students with an understanding of the business and legal environments that will guide future management decisions and inquiry. Not open to first-year students. Staff/Offered every semester

203 MANAGEMENT ACCOUNTING/LECTURE, DISCUSSION

Emphasizes accounting from the management perspective. Students learn principles of management decision making using accounting information. Prerequisites: Management 101; not open to first-year students. Staff/Offered every semester

210 MANAGEMENT AND BEHAVIORAL PRINCIPLES/LECTURE, DISCUSSION

General principles of management are studied, emphasizing the behavior of people in organizational settings. Topics include principles of organization, decision making, leadership, motivation and rewards, job satisfaction,

appraising employee performance, and the impact of demographic diversity on organizations. Prerequisite: juniors and seniors only. Staff/Offered every year

211 ORGANIZATION STRUCTURE AND PROCESS/LECTURE, DISCUSSION

Surveys major concepts of organizational theory, applying these concepts to business problems. Topics include properties of organizational environments, organizational structure, organizational power and conflict, and organizational change. Prerequisites: Management 210; juniors and seniors only. Staff/Offered periodically

225 HUMAN RESOURCE MANAGEMENT/LECTURE, DISCUSSION

Covers general functions of human resource management, including job design, recruitment, selection, management development and training, performance appraisal, employee rights, labor relations and collective bargaining, wages and fringe benefits, and compensation systems. Prerequisite: juniors and seniors only. Staff/ Offered periodically

226 INDUSTRIAL RELATIONS/LECTURE, DISCUSSION

Introduces the concepts, theory and practice of labor-management relations. Topics include the development of the trade union movement; union organizing; the structure, practices and outcomes of collective bargaining; the administration of the collective agreement; dispute resolution procedures; and the public policy of labor relations. Prerequisite: juniors and seniors only. Staff/Offered periodically

230 MARKETING MANAGEMENT/LECTURE, DISCUSSION

Surveys the role of marketing in business and society. Topics include the marketing environment, marketing research and information systems, consumer behavior, the organizational consumer, products, pricing, distribution, promotion, international service, and nonprofit marketing. Prerequisites: Economics 010, 011; Management 101; juniors and seniors only. Staff/Offered every semester

231 MARKETING RESEARCH/LECTURE, DISCUSSION

Marketing research focuses on consumer behavior and retail advertising. Topics include primary and secondary data collection, questionnaires for attitude and awareness surveys, mail and phone surveys, personal interviews, focus groups, and data analysis techniques. Prerequisites: Management 230; juniors and seniors only. Staff/Offered periodically

234 CONSUMER BEHAVIOR/LECTURE, DISCUSSION

Examines how people search for, purchase, use, evaluate, and dispose of the products, services, and ideas they expect to satisfy their needs. Emphasizes the issues of market segmentation and the diffusion of innovations. Ethical, legal, and public policy issues are also discussed. Prerequisites: Management 230; juniors and seniors only. Staff/Offered periodically

240 CORPORATE FINANCE/LECTURE, DISCUSSION

Examines financial decision making by the internal financial manager. A study is made of valuation, cost of capital, capital structure, capital budgeting, and financial analysis. Prerequisites: Economics 010, 011, 160; Math 113 or 120; Management 101; juniors and seniors only. Staff/Offered every semester

242 INVESTMENTS/LECTURE, DISCUSSION

Covers investment principles, market behavior, and investment strategy. Investment principles include portfolio selection, fundamental analysis, portfolio theory, debt instruments and money markets, the stock option market, and alternative investments. Prerequisites: Management 240; juniors and seniors only. Staff/Offered periodically

250 OPERATIONS MANAGEMENT/LECTURE, DISCUSSION

Provides overview of operations management systems, emphasizing model building and applications. Topics include forecasting, quality control, inventory management, material requirement planning, machine loading, job sequencing and scheduling, project management and control, decision theory, and linear

programming. Prerequisites: Economics 010, 011, 160; Management 101, 104; Math 113 or 120; juniors and seniors only. Staff/Offered every semester

252 CORPORATE ENVIRONMENTAL MANAGEMENT

This course will present many of the issues facing business and industry with relation to the natural environment. Topics such as external competitive pressures, internal strategic planning and positioning, corporate social responsibility, and stake-holder theory will be examined from a corporate environmental perspective. Case study analysis, readings, speakers, videos, and facility tours will be the methods of study. Prerequisite: juniors and seniors only. Staff/Offered periodically

260 BUSINESS POLICY/CASE STUDIES/LECTURE, DISCUSSION

Describes the integration of major management functions (e.g., marketing, finance, and production) in the selection and execution of appropriate strategy. This capstone course must be taken during the senior year. Prerequisites: Management 210, 230, 240, 250; seniors only. Staff/Offered every fall semester

262 BUSINESS ETHICS/CASE STUDIES/LECTURE, DISCUSSION

The social, political, technological and ethical issues confronting modern corporations require contemporary managers to develop a broad knowledge base to deal with complex situations. This course examines the relationship between organizations and their many stakeholders. Managerial values and ethics are analyzed. Prerequisite: juniors and seniors only. Staff/Offered every year

299 INTERNSHIPS/DIRECTED READINGS

Internships and directed readings, open to juniors and seniors only, are offered to qualified students upon application. They are limited to no more than one course credit each and do not count toward the management major or minor. Students may take no more than two each of such courses in the Management Department.

The Master in Business Administration Program

The Clark University M.B.A. program develops competence in basic management functions, skill in managing organizations, and an understanding of the global environment. Each graduate of Clark's M.B.A. program is able to demonstrate:

- Competence in each of the functional areas of management;
- In-depth understanding of one of the functional areas of management, or health administration or global business;
- Skill in integrating the management functions into an effective organization, and understanding the legal, political, ethical, social, and environmental responsibilities of management;
- Appreciation of the global context in which most organizations function; and
- The leadership and communication skills needed to formulate and implement management decisions.

Curriculum

The M.B.A curriculum consists of a combination of 7-week course modules and full-semester, 14-week courses. Modular courses count as 1/2-unit each, while a full semester is 1 unit. A total of 16 units are required to complete the degree. Four of the units (7 courses) may be waived if equivalent courses have been completed in an undergraduate program, with a grade of B- or better. A graduate internship is required for all students with less than three years work experience in the U.S.

Required Foundation Courses **(1-1/2 units)**

- ECON 4004 Management Economics (1/2 unit)
- STAT 4005 Statistical Methods (1/2 unit, waivable)
- STAT 4006 Management Decision Models (1/2 unit)

Required Functional Courses

- MGMT 4301 Managing Teams (1/2 unit)
- MGMT 4302 Thinking Strategically (1/2 unit)
- MGMT 4303 Designing Organizations (1/2 unit)
- MGMT 4304 Implementing Strategic Change (1/2 unit)
- ACCT 4100 Foundations of Accounting (1 unit)
- FIN 4201 Financial Management (1/2 unit)
- FIN 5301 Stock & Bond Valuation or
FIN 5302 Quantitative Techniques for
Derivatives Valuation (1/2 unit)
- MKT 4401 Marketing Management (1/2 unit)
- MKT 4402 Marketing Strategy &
Simulation (1/2 unit)
- MIS 4501 Management Information
Systems (1/2 unit)
- MIS 7-week elective (1/2 unit)
- OM 4601 Operations Management (1/2 unit)

Required General Management Courses

- MGMT 4305 Career Development (1/2 unit; required for students who must complete a graduate internship)
- MGMT 4709 Business in Society (1/2 unit)
- MGMT 4707 International Mgt. & Global Competition (1/2 unit)
- MGMT 4708 Contemporary Business Law (1/2 unit)
- Capstone (1 unit) (Must be CAP 4808-
Applied Field Project for those in Health
Care concentration)

Concentration and Free Electives

In addition to the courses listed above, students must take three to four units in one area of concentration, plus additional electives in any other area to total 16 units for the entire program. Students may choose from the following areas of concentration:

Accounting

- ACCT 5101 Financial Accounting and Reporting I (1 unit)

ACCT 5102 Financial Accounting and Reporting II (1 unit)
 ACCT 5103 Management Accounting (1 unit)
 ACCT 5104 Accounting Information Systems (1 unit)
 ACCT 5105 Financial and Operational Auditing (1 unit)
 ACCT 5106 Management Control Systems (1 unit)
 ACCT 5107 Analysis of Financial Statements (1 unit)
 ACCT 5108 Business Analysis and Valuation (1 unit)

Expanded Accounting Option

The expanded accounting concentration satisfies the 150-hour, postsecondary education requirement for the Certified Public Accountant (CPA) examination. It also allows students an opportunity to prepare for the Certified Management Accountant (CMA) examination. Students pursuing this option must complete the foundation, functional and general management courses, along with the following 6 courses:

ACCT 5101 Financial Accounting and Reporting I
 ACCT 5102 Financial Accounting and Reporting II
 ACCT 5103 Management Accounting
 ACCT 5104 Accounting Information Systems
 ACCT 5105 Financial and Operational Auditing
 FIN 5206 Tax Strategies and Management Decisions

Finance

FIN 5201 Case Studies in Corporate Finance (1 unit)
 FIN 5203 Investment Strategies (1 unit)
 FIN 5206 Tax Strategies and Management Decisions (1 unit)
 FIN 5207 Advanced Derivatives (1 unit)
 FIN 5208 Fixed Income Securities (1 unit)
 FIN 5281 Case Studies in International Finance (1 unit)

FIN 5301 Stock & Bond Valuation (1/2 unit)
 FIN 5302 Quantitative Techniques for Derivatives Valuation (1/2 unit)
 FIN 5309 Financial Econometrics (1/2 unit)
 FIN 5310 Case Studies in Derivatives (1 unit)
 FIN 5311 Portfolio Management (1/2 unit)
 FIN 5900 Technical Analysis (1 unit)
 FIN 5900 Real Estate Finance (1 unit)
 FIN 6000 Financial Institutions (1/2 unit)
 ACCT 5107 Analysis of Financial Statements (1 unit)
 ACCT 5108 Business Analysis and Valuation (1 unit)

Global Business

FIN 5281 International Finance (1 unit, required for concentration)
 MKT 5482 International Marketing (1 unit, required for concentration)
 MGMT 5407 International Labor Relations (1/2 unit)
 MGMT 5783 Global Business Seminar (1 unit)
 MGMT 5900 Global Entrepreneurship (1 unit)
 MGMT 5900 Doing Business in Northern Europe (1 unit)
 MGMT 6000 Global Business Teams (1/2 unit)

Health Care Management

Students concentrating in Health Care Management must take the following six courses (4 units):

HCM 4800 Health Systems (1 unit)
 HCM 4806 Strategic Management of Health Care Organizations (1 unit)
 HCM 4810 Revenue Issues in Health Care (1/2 unit)
 HCM 4811 Management Control in Health Care Organizations (1/2 unit)
 HCM 4812 Topics in Institutional Management (1/2 unit)
 HCM 4813 Topics in Ambulatory Care Management

Management

- MGMT 4305 Career Development
(1/2 unit; if not required for graduate internship)
- MGMT 4701 Organizational Communication (1/2 unit)
- MGMT 5401 The Contemporary Workplace (1/2 unit)
- MGMT 5402 Discrimination in Employment (1/2 unit)
- MGMT 5304 Diversity in the Workplace (1 unit)
- MGMT 5305 Industrial Relations (1/2 unit)
- MGMT 5306 Collective Bargaining (1/2 unit)
- MGMT 5307 International Labor Relations (1/2 unit)
- MGMT 5783 Global Business Seminar (1 unit)
- MGMT 5790 New Venture Management (1 unit)
- MGMT 5792 Management Consulting Projects (1 unit)
- MGMT 5900 Spirituality and Business (1 unit)
- MGMT 5900 Global Entrepreneurship (1 unit)
- MGMT 5900 Doing Business in Northern Europe (1 unit)
- MGMT 5900 Global Entrepreneurship (1 unit)
- MGMT 6000 Learning by Analogy (1/2 unit)
- MGMT 6000 Managing Change and Conflict (1/2 unit)
- MGMT 6000 Negotiations (1/2 unit)
- MGMT 6000 Global Business Teams (1/2 unit)
- OM 5603 Operations Technology Management (1 unit)

Management Information Systems

- MIS 5601 Database Management Systems (1/2 unit)
- MIS 5602 Decision Support Systems (1/2 unit)
- MIS 5503 Telecommunications Systems (1/2 unit)

- MIS 5504 Software Methodologies (1 unit)
- MIS 5505 Management of Information Technologies (1 unit)
- MIS 5900 E-Commerce (1 unit)
- MIS 5900 Website Development (1 unit)

Marketing

- MKT 5401 Marketing Research (1 unit)
- MKT 5402 Consumer and Industrial Buyer Behavior (1 unit)
- MKT 5403 Advertising and Promotion (1 unit)
- MKT 5404 Sales and Sales Management (1 unit)
- MKT 5405 Business to Business Marketing (1 unit)
- MKT 5406 Market Pricing (1 unit)
- MKT 5407 Services Marketing (1 unit)
- MKT 5482 International Marketing (1 unit)
- MKT 5494 Product Management (1 unit)

Free Electives

(Count as electives but do not count towards any area of concentration)

- COM 4700 Managerial Communications (1/2 unit)
- MGMT 4305 Career Development (1/2 unit if taken as a requirement for graduate internship)

The Master of Science in Finance Program

The Clark University M.S.F. program is a rigorous curriculum focusing on the skills and knowledge required to apply advanced financial theories to complex financial management problems. To be successful in this program, students need to have strong mathematical skills, along with prior courses in the following areas:

- Financial Accounting
- Economic Theory
- Statistics

Curriculum

The curriculum for the M.S.F. consists of the following courses, totaling 10 units of credit:

- FIN 5301 Stock & Bond Valuation (1/2 unit)

FIN 5302 Quantitative Techniques for
Derivatives Valuation (1/2 unit)
FIN 5311 Portfolio Management (1/2 unit)
FIN 5309 Financial Econometrics
(1/2 unit)
FIN 5201 Case Studies in Corporate
Finance (1 unit)
FIN 5310 Case Studies in Derivatives
(1 unit)
FIN 5207 Advanced Derivatives (1 unit)
FIN 5208 Fixed Income Securities (1 unit)
FIN 5203 Investment Strategies (1 unit)
FIN 5281 Case Studies in International
Finance (1 unit)
Electives: 2 units of electives in Finance,
Accounting or Economics

Full-time and Part-time Options/Class Locations

The M.B.A. and M.S.F. Programs are accessible to both full- and part-time students. Clark operates on a semester system. During the fall and spring semesters, classes are held from 9 a.m. until noon and from 1 p.m. until 4 p.m. at the Clark campus. Classes meet from 6 p.m. to 9 p.m. at Clark and in Framingham at the Clark University Graduate Management Center on Route 9. All classes meet once a week, on Monday, Tuesday, Wednesday, or Thursday. Summer sessions are held at both campuses, with classes meeting mid-May to the end of June.

Academic Policies

General Graduation Requirements

Candidates for the M.B.A. degree must complete a total of 16 units of coursework as described above. Candidates for the M.S.F. degree must complete the 10 units of coursework as described above. Students must pass a minimum of 8 units at Clark University GSOM for the MBA program (excluding MATH 4004), and for the M.S.F. program to meet the residency requirements. Students are usually permitted a maximum of six years from the date of enrollment in the M.B.A. or M.S.F. program to complete all degree requirements. The minimum grade-point average required for graduation is 3.0 (B).

Course Waivers

Course waivers are based on transcript reviews and are granted only for courses taken before the student's matriculation at Clark. A waiver reduces the number of courses the student must take. Typically, a waiver is granted when an entering student presents evidence of having passed an equivalent graduate-level course or baccalaureate courses with grades of B- or better in the relevant subject area within the last six years.

Students applying for waivers should submit a Request for Course Waiver form with their application to the Admissions Office. The opportunity for waiving courses exists only during a student's first year in the program. Waivers must be approved before the registration deadline. Students should consult the Graduate School of Management catalog for a listing of waivable courses.

Transfer Credit and Residency Requirement

M.B.A. and M.S.F. students may receive transfer credits for no more than two graduate-level courses taken at schools accredited by the AACSB. Usually, transfer credits are assigned only to elective courses. The student must have earned grades of B or better, and the credits from the course(s) must not have applied to another degree. Using transfer credits, students can reduce their degree requirements by two courses. Prior approval, which is granted by the assistant dean for academic affairs, is required for transfer credit after the student has matriculated in the M.B.A. or M.S.F. program. Grades from transfer courses are not calculated into a student's Clark grade-point average. Transfer course approval is granted only under certain conditions (a scheduling conflict, a course not available at Clark in a student's final semester, etc.). Regardless of the number of courses transferred or waived, M.B.A. candidates must complete a minimum of 8 courses (excluding MATH 4003) taken at Clark to meet Clark's residency requirement. M.S.F. candidates must complete a minimum of eight units to meet residency requirements.

Grade-Point Average

Master's degree candidates must maintain a minimum grade-point average of 3.0 to remain in good standing and eligible for graduation (A = 4.0 points, B = 3.0 , C = 2.0, and F = 0: + or - symbols attached to letter grades increase or decrease them, respectively, by 0.3). Waived courses, incomplete courses and courses taken outside Clark University are not included in computations of grade-point averages.

Grading System

Letter grades are applied as follows:

- A Outstanding
- B Good
- C Marginal Pass
- F Failing
- I Incomplete: Incompletes are given at the discretion of the instructor when circumstances beyond the student's control prevent him or her from meeting specific out-of-class course requirements after the 10th scheduled class meeting. Students have 60 days from the date of the last class meeting of the course to make up outstanding course work. Incomplete courses will be converted to failures if not completed within the time period.
- W Withdraw: Indicates that the student withdrew from the course. Students may not withdraw after the tenth scheduled class meeting.

Grade Changes

Once grades have been submitted to the registrar, grade changes can be made only if the instructor certifies in writing that the grade to be altered resulted from an error.

Full-time Students

Students must be registered for at least three units in a given semester to be considered a full-time student in the Graduate School of Management.

Review of Graduate Standing

All student academic records are reviewed each semester. Students with cumulative grade-point averages of 3.0 or more are consid-

ered to be in good standing. While the grade of C earned in a course is a passing grade, a cumulative grade-point average of B is required for graduation. Any student whose cumulative grade-point average falls below 3.0 is not considered to be performing adequately. Students are placed on academic probation when they have taken four or more units and their cumulative grade point average falls below 3.0. Students who remain on academic probation after taking eight units may be dismissed from the Graduate School of Management.

Leave of Absence

Students currently matriculated in the Graduate School of Management may take an official leave of absence for up to one year. Leave is granted by the assistant dean for academic affairs on written application by the student. Leaves may be granted for work, health, travel, or personal development reasons. Students who do not register for courses in the semester following the leave of absence will be withdrawn and must reapply for admission.

Courses

(See the Graduate School of Management Catalog for more information.)

ACCT 4100 FOUNDATIONS OF ACCOUNTING

Managers use accounting data to measure and evaluate organizational performance and to make decisions. This course introduces accounting as the language of business by identifying and discussing principles and concepts. Topics include recording process, financial reporting, and the application of accounting information in managerial decision processes. Students are provided opportunities to enhance their analytic skills through practice in compilation, reformulation, and analysis of basic financial data. 14 weeks

ACCT 5101 FINANCIAL ACCOUNTING AND REPORTING I

Accounting issues relevant to commercial organizations are numerous and complex. A set of accounting literature, referred to as Generally Accepted Accounting Principles or GAAP, guides the profession in the resolution

of these issues. This course does not attempt to cover all GAAP, but rather provides a foundation for solving practical financial problems by introducing certain topics that are important in understanding the complexities of the business and financial world. The conceptual framework of accounting is discussed and then used as a basis to study accounting literature related to the recognition and measurement of current and non-current assets, current and non-current liabilities, stockholders' equity, and the development of income statements and balance sheets. (Prerequisite: ACCT 4100 or its equivalent) 14 weeks

ACCT 5102 FINANCIAL ACCOUNTING AND REPORTING II

A continuation of Financial Accounting and Reporting I, this course addresses accounting literature guiding the profession in such areas as accounting for income taxes, pensions and postretirement benefits, and leases. The treatment of accounting changes and errors, the preparation of the statement of cash flows, and the disclosure required in financial reporting are also discussed. Finally, advanced topics such as business combinations, consolidated financial statements, and accounting for partnerships are addressed. (Prerequisite: ACCT 5101) 14 weeks

ACCT 5103 MANAGEMENT ACCOUNTING

This course covers the collection and analysis of cost data, methods of cost control, and the relevance of various accounting data for managerial decision making in manufacturing and non-manufacturing organizations. Topics include: activity-based costing and management, standard costing issues, decision making with management accounting data, budget analysis, new cost management issues, and various cost control and performance evaluation issues. (Prerequisite: ACCT 4100) 14 weeks

ACCT 5104 ACCOUNTING INFORMATION SYSTEMS

This course explains the various control and accounting procedures used in collecting, measuring, summarizing, and reporting financial data generated by an organization's operating

units. The course emphasizes procedural techniques and studies the flow of financial data through an organization's accounting system. (Prerequisites: ACCT 4100, MIS 4501) 14 weeks

ACCT 5105 FINANCIAL AND OPERATIONAL AUDITING

This course covers fundamental aspects of financial auditing including management's responsibility for financial statements, the legal liability of auditors, evaluation of internal control structures, substantive tests and tests of systems, and audit reports. Operational auditing and current developments in environmental auditing are also covered. (Prerequisite: ACCT 4100) 14 weeks

ACCT 5106 MANAGEMENT CONTROL SYSTEMS

This course studies organizational planning and control and analyzes the ways in which management accounting practices can aid (and occasionally impede) planning and control processes. Topics include management control systems, key variables and performance measurements, organizing for control, budget planning, and measuring divisional performance. (Prerequisite: ACCT 4100; MGMT 4301-4304 is recommended) 14 weeks

ACCT 5107 ANALYSIS OF FINANCIAL STATEMENTS

The topics covered in this course are intended to increase skill levels in interpreting financial statements and reports, reconstructing and restructuring financial data, use of analytical techniques for financial statement analysis, and communicating financial results. (Prerequisite: ACCT 4100) 14 weeks

ACCT 5108 BUSINESS ANALYSIS AND VALUATION

This course examines accounting, finance, business strategy and financial forecasting and valuation concepts. The first part of the course develops methods and techniques, which are later used in the evaluation of equity and debt financing of corporations, analysis of acquisitions and mergers of companies, credit analysis, prediction of financial distress and bankruptcies, evaluation of corporate financial policies,

and improvement of communication with investors and creditors of corporations. This case-oriented course emphasizes how to apply accounting, finance and business strategy concepts in practical situations. The course relies heavily on financial information analyses, and will count as an accounting or finance elective in both the MBA and MSF programs. (Prerequisites: at least one accounting and one finance course) 14 weeks

COM 4700 MANAGEMENT COMMUNICATIONS

This course is designed to help managers communicate with confidence by showing them how to prepare clear, concise memos, letters, reports, and proposals, as well as how to deliver effective oral presentations. Through active class participation and in-class writing exercises, students develop confidence in their ability to communicate effectively. 7 weeks

ECON 4004 MANAGEMENT ECONOMICS

Managers of organizations, whether for-profit, nonprofit, or government agencies face a common set of resource allocation problems. This course will develop a student's ability to formulate and solve these problems, drawing upon the economic theories of consumer demand, the firm and industrial organization as well as mathematical optimization techniques. It will provide a framework for analyzing the flexible multi-product firm as well as competitive and cooperative business situations from a strategic (game theoretic) perspective. Topics to be surveyed include: demand analysis, production and cost analyses, flexible manufacturing, market structure and strategic behavior, pricing practices, government regulation, and decision making under uncertainty. (Prerequisite: MATH 4003 or math entrance requirement fulfilled) 7 weeks

FIN 4201 FINANCIAL MANAGEMENT

This course provides an introduction to financial principles and concepts, such as maximizing firm value, importance of cash flows, time value of money, stock and bond valuation, cost of capital, and investment decisions criteria. (Prerequisites: ECON 4004, STAT 4006, ACCT 4100) 7 weeks

FIN 5201 CASE STUDIES IN CORPORATE FINANCE

This course extends the discussion from FIN 4201 of the theoretical financial issues facing the corporation. The student is exposed to a more in-depth presentation of the underlying financial theories and gains practice applying these theories to actual problems either through case analyses or additional readings. (Prerequisite: FIN 4201) 14 weeks

FIN 5203 INVESTMENT STRATEGIES

Topics covered include investment principles, market behaviors, and investment strategies. Students examine the types of risks associated with and the returns available from marketable securities. In addition to studying stocks and bonds, the course provides a risk-return analysis of alternative investment vehicles, such as options and futures. Views of investment professionals are presented to the class live and by video records. (Prerequisite: FIN 4201) 14 weeks

FIN 5206 TAX STRATEGIES AND MANAGEMENT DECISIONS

This course covers the fundamentals of individual and corporate taxation including an analysis of tax policy, structure, legal hierarchy and procedure, as well as a discussion of tax aspects of the various common forms of business organizations, and an examination of tax considerations in implementing employee benefit plans. The basic foundations of international tax are addressed. Cases emphasize the necessity of considering the impact of federal taxes in management decisions. Students perform a tax compliance and planning project. 14 weeks

FIN 5207 ADVANCED DERIVATIVES

Although the quantity and complexity of derivative securities has exploded in recent years, there are basic mathematical tools that can be used to accurately place a value on any derivative, no matter how complex. This course focuses on learning these tools and understanding how they are applied to standard derivatives such as futures, options and swaps. The course will also focus on applying these tools to current financial engineering problems. (Prerequisite: FIN 5302) 14 weeks

FIN 5208 FIXED INCOME SECURITIES

This course examines fixed-income securities like U.S. Treasury bills, notes, bonds, corporate bonds and mortgages and then analyzes some of the derivatives based upon these securities. The theory of valuation for fixed-income securities is presented along with models of the term structure of interest rates. Much of the course is devoted to using personal computers to model the term structure as a basis for valuation. (Prerequisite: FIN 5302) 14 weeks

FIN 5281 CASE STUDIES IN INTERNATIONAL FINANCE

The focus is on specific problems encountered by financial managers in corporations having international financial functions. Although international capital budgeting and financing in a global environment are covered, the major emphasis is on managing foreign exchange risk. (Prerequisite: FIN 4201) 14 weeks

FIN 5301 STOCK AND BOND VALUATION

This course provides an introduction to investment theory and security valuation. Surveys techniques for stock and bond valuation, including dividend discount models, capital asset pricing models, multiple-stage growth, and term structure models. (Prerequisite: FIN 4201) 7 weeks

FIN 5302 QUANTITATIVE TECHNIQUES FOR DERIVATIVES VALUATION

This course focuses on methods of pricing options, futures contracts, forward contracts, and swaps. Models include the binomial and Black-Scholes models for options and arbitrage-free models for forwards, futures, and swaps. (Prerequisite: FIN 4201) 7 weeks

FIN 5309 FINANCIAL ECONOMETRICS

This course provides a survey of common statistical techniques employed in financial research, including linear regression, factor models, time series models, and forecasting models. (Prerequisite: FIN 4201) 7 weeks

FIN 5310 CASE STUDIES IN DERIVATIVES

The goal of this course is a thorough exploration of the risk management process. This

decision involves identifying and quantifying the risk to be transferred, selecting the means of transferring the risk, and implementing the risk management decision. Risk management is only partly a quantitative field. Strategy, negotiation, marketing, and basic financial management are important as well. This course will focus on several important areas: (1) Understanding the players in the market for financial risk: The buyers and sellers of risk and the various intermediaries. (2) Making a risk management decision with only limited information about the true risks a firm faces. (Prerequisite: FIN 5302) 14 weeks

FIN 5311 PORTFOLIO MANAGEMENT

This course covers such topics as passive and active portfolio management, performance measurement, descriptions of investment companies, and diversification to include international investments and non-financial assets. (Prerequisite: FIN 5301 is recommended) 7 weeks

FIN 5900 TECHNICAL ANALYSIS

The focus of this course is how investors might use past market data to forecast future asset prices. This methodology is opposed to fundamental analysis, which depends on past accounting data for predictions of future prices. The class will examine popular methods of technical analysis and try to forecast prices using these methods on actual data. Speculative trading techniques such as entering trades via various types of orders, protecting by stop loss orders, and pyramiding of positions will be presented. The course will discuss the fit of technical analysis into the efficient markets hypothesis and into current finance theory. This course is offered as a special topics class and counts as a finance elective in both the MBA and MSF programs. (Prerequisite: FIN 4201) 7 weeks

FIN 6000 FINANCIAL INSTITUTIONS

This course provides an understanding of financial institutions and of the effects of the regulatory and tax environments on the opera-

tion of these institutions. The special requirements of financial intermediaries are examined in relation to market participants such as investors and corporations. (Prerequisite: FIN 4201) 7 weeks

HCM 4800 HEALTH SYSTEMS

This course should be one of the first taken in the Health Care Management concentration because it provides a framework that enables the student to see the contributions that the other required courses make to health system management. Initially, this course examines various input-throughput-output models of health systems and discusses the information necessary to understand the variety of components and links. It then uses the systems approach to identify key issues in various health service sectors: for example, primary care, hospital services, and high-technology services. Discussions and student papers focus on key issues related to health systems in the United States and other countries. 14 weeks

HCM 4806 STRATEGIC MANAGEMENT OF HEALTH CARE ORGANIZATIONS

Integrates different facets of the curriculum by exploring the relationship between the context, content, and process of decision making in health services organizations. We take into consideration the social role of health services organizations, the expectations and power of internal and external stakeholders, the influence of decision makers' perceptions, values, and goals, and the applicability of practices from private industry to the health services sector. Cases, readings, and class discussions integrate the complexities of management and leadership in health services organizations. Prerequisites: MGMT 4301, MGMT 4302, MKT 4401 and either HCM 4811 or FIN 4201. Required for health care concentrators; can be used as an elective course for all others. 14 weeks.

HCM 4810 REVENUE ISSUES IN HEALTH CARE ORGANIZATIONS

Reviews reimbursement methods for hospitals, physicians, nursing homes, and home health

care agencies. We identify the economic incentives for providers and the behavioral and ethical issues associated with different reimbursement methods and with managing the revenue stream. We also study managed care arrangements and the development of capitation rates and discuss allocation of global payments across providers in integrated health systems. Lastly we look at sources of funds unique to not-for-profit organizations: fund raising and tax-exempt bonds. Prerequisite: ACCT 4100. Required for the health care concentrators and can be used as an elective course for all others. 7 weeks

HCM 4811 MANAGEMENT CONTROL OF HEALTH SERVICES ORGANIZATIONS

Applies management control tools in hospitals, neighborhood health centers, home health agencies, nursing homes, physician offices, and integrated health systems. The tools we use include budgeting, cost allocations, break-even analysis, performance measures, and variance analysis. The cases, readings, and class discussions also explore the interactions between management control, the behavior of organization members and the expectations of external stakeholders. Prerequisite: ACCT 4100. Required for health care concentrators; can be used as an elective course for all others. 7 weeks

HCM 4812 TOPICS IN INSTITUTIONAL MANAGEMENT

Focuses on the management of hospitals and nursing homes. It is aimed at individuals without significant management experience in health care, providing a view of governance and internal operations, and exploring the interactions between client expectations, management's role, and the professional staff in these organizations. Case discussions, readings, and site visits integrate management technique, theoretical reflections, and health policy issues. Prerequisite: MGMT 4301 and MGMT 4302. Required for health care concentrators; can be used as an elective course for all others. 7 weeks

HCM 4813 TOPICS IN AMBULATORY CARE MANAGEMENT

Focuses on the management of clinics, physician offices, assisted-living facilities, and home health care organizations (including hospice). It is aimed at individuals without significant management experience in health care, exploring client expectations and the interactions between management and clinical and support staffs in each setting. Case discussions, readings, and site visits integrate management techniques, theoretical reflections, and health policy issues. Prerequisites: MGMT 4301 and MGMT 4302. Required for health care concentrators; can be used as an elective course for all others. 7 weeks

MATH 4004 MATHEMATICS FOR MANAGERS

A basic level of mathematical competence is required in many of the courses offered by the Graduate School of Management. MATH 4004 is designed for students whose skill in mathematics falls below that level. Course coverage includes: understanding the basics of algebra, generating and solving simple equations and sets of equations, graphical functions, and translating business problems into mathematical notation. Business applications of mathematical techniques are emphasized throughout the course. Satisfies the math admissions requirement only and cannot be taken as part of the 16-unit MBA program. 14 weeks

MGMT 4301-4304 CREATING EFFECTIVE ORGANIZATIONS SERIES

This four-module course provides students with the tools needed to build and maintain effective teams and to select and implement appropriate organizational structures, processes, and strategies. The course is designed to help students develop critical management competencies in the areas of teamwork and people skills, critical thinking and decision-making, and leadership. A yearlong project is woven throughout the four modules. This project requires students to integrate material on work teams, leadership, organizations structure and processes, and strategic management, and to

use this material to analyze the real-life challenges facing today's managers. Students must take the four modules consecutively during the first year of their enrollment.

MGMT 4301 CEO: MANAGING TEAMS

This first module in the CEO series provides students with the knowledge and skills needed to build and maintain effective teams in today's global economy. Students will learn how to set up a team and how to manage internal team processes. Special attention will be devoted to the challenges of managing both decision-making teams and multicultural teams.

Throughout the module, case studies and exercises will be used to enhance each participant's ability to manage teams. 7 weeks

MGMT 4302 CEO: THINKING STRATEGICALLY

This second module in the CEO series will focus on developing tools to analyze organizational strategy. Students will learn how to assess an organization's external competitive and internal operating environment. Through readings, case discussions, and in-class exercises, students will gain practice in evaluating strategy in the context of an organization's internal and external environment.

(Prerequisite: MGMT 4301) 7 weeks

MGMT 4303 CEO: DIAGNOSING ORGANIZATIONS

This third module in the CEO series will provide students with the tools needed to analyze internal organizational structure and processes, diagnose problems, design effective solutions, and implement needed changes. Topics include organizational design, organizational culture, organizational processes, and organizational change. Readings, case studies, and exercises will be used to provide students with the opportunity to diagnose and develop solutions to organizational problems. (Prerequisite: MGMT 4301, MGMT 4302) 7 weeks

MGMT 4304 CEO: IMPLEMENTING STRATEGIC CHANGE

This final module in the CEO series will focus on formulating and implementing strategy. Students will use the concepts learned earlier to generate and evaluate strategic alternatives

and to assess them in terms of an organization's ability to implement them. The primary objectives will be to understand the relationship between organizational culture, structure, and leadership, and between strategy formulation and implementation. (Prerequisite: MGMT 4301-4303) 7 weeks

MGMT 4305 CAREER DEVELOPMENT

Skillful career management is vital to both professional success and personal satisfaction. This course helps students develop career management skills that are appropriate to any level of career development, from making initial career decisions to later career changes. Self-assessment instruments, exercises, and cases are used throughout the course. Topics include self-assessment, career decision-making, job search strategies, organizational assessment, and socialization processes. Required for all students who must complete a graduate internship. Students who waive the internship requirement may take this course for elective credit. 7 weeks

MGMT 4701 ORGANIZATIONAL COMMUNICATION

This course is designed to increase students' knowledge of the theory and practice of communication in organizations. Topics include interpersonal communication issues, including the effects of culture, status, and gender, and organizational issues such as crisis communication and public relations. Much of the course is devoted to skill development, emphasizing both written and oral presentations. 7 weeks

MGMT 4706 BUSINESS POLICY

This course focuses on the organizational processes for selecting and executing an appropriate competitive strategy. The course objectives are to develop skills for evaluating the impact of internal and external forces on an organization's strategic choices, to enhance understanding of unstructured decisions, to understand the relationship between corporate cultures and competitive strategies, and to assess the nature and importance of global strategies. Students who must complete the MGMT 4301-4304 series should not take this

course. (Prerequisites: FIN 4201, MGMT 4301-4304, MKT 4401, OM 4601) 14 weeks

MGMT 4707 INTERNATIONAL MANAGEMENT AND GLOBAL COMPETITION

This course addresses core management issues from the international perspective. Business policy, competitive strategy, organizational and control mechanisms, business modes, and operations are thus covered from the perspective of global business. Geographic diversity and geographical influences are at the heart of the global economy. The diverse cultural, economic, and political environments facing the business manager are unique dimensions that make up the foundation of the new course. (Prerequisites: ECON 4004, MGMT 4301) 7 weeks

MGMT 4708 BUSINESS LAW

This course provides complete coverage of business law with a focus on contemporary, ethical, international and technology issues. This course recognizes the importance of the application of court decisions, statutes and government regulation to business and business-making decisions in a global market. 7 weeks

MGMT 4709 BUSINESS IN SOCIETY

This course combines the study of business ethics with the consideration of business in its social, technological, political, and natural environments. Personal values and their function in organizational settings are the focus of the first half of the course, while the second half examines corporate responsibility and stakeholder management in the international contest. The emphasis throughout is on creative managerial decision-making, with analytic and implementation skills developed through case discussion, case writing, and class presentations. 7 weeks

MGMT 5304 DIVERSITY IN THE WORKPLACE

The race and gender composition of the U.S. workforce has become increasingly diverse in recent years. Drawing on research in organizational behavior, psychology, and sociology, this course explores the complex dynamics that underlie interpersonal interactions in diverse

organizations. Students will examine the past and present experiences of members of different race and gender groups in the U.S. workplace. Finally, students will consider how organizations can manage diversity in a manner that fully utilizes the talents of all members of the workforce. Male and female students of all racial/ethnic backgrounds are encouraged to enroll. (Prerequisite: MGMT 4301-4304)
7 weeks

MGMT 5305 INDUSTRIAL RELATIONS

Broadly defined, industrial relations refers to the relationships between employees and employers, through union representatives. This course serves as an introduction to the concepts, theories, and practice of labor-management relations. Topics include: the development of the trade union movement; union structure, government and growth; the practice of collective bargaining; the administration of the collective bargaining agreement; dispute resolution procedures; and the legal framework of labor relations. 7 weeks

MGMT 5306 COLLECTIVE BARGAINING

Collective bargaining is a process by which representatives of labor and management seek agreement on the terms and conditions of employment. The public often has a vested interest in the process, especially when conflicts over terms of employment cannot be resolved at the bargaining table. Topics covered include the evolution of bargaining, theories of bargaining power and behavior, and the impact of the law on the conduct and substance of bargaining. The range of bargaining issues is described, along with variations in bargaining structures. The grievance procedure is examined with respect to the application and interpretation of collective agreements. Students participate in a negotiation simulation and a collective bargaining simulation.
7 weeks

MGMT 5307 INTERNATIONAL LABOR RELATIONS

This course provides an international perspective on labor relations by comparing labor union activities, non-union forms of worker

representation, and labor legislation in several countries. Topics include collective bargaining and wage determination, union growth, labor disputes, protection against unfair dismissal, grievance procedures, and employee participation in management decision-making. National trends are examined and compared through readings, case studies, and presentations. (Prerequisite: MGMT 4301-4304)
7 weeks

MGMT 5308 CONSULTING STRATEGIES AND SKILLS

Consultants are often employed by management to analyze and resolve continuing organizational problems. This course takes a practical approach to learning about the consultant's role through the use of cases and consulting projects. Topics covered include problem definition and contracting, organizational diagnosis and change management, the management of consulting relationships, and the consultant's use of self. (Prerequisite: MGMT 4301-4304)
14 weeks

MGMT 5401 THE CONTEMPORARY WORKPLACE

This course examines contemporary issues in employment. Topics include downsizing the workforce, discrimination in selection and employment, sexual harassment, employee rights and responsibilities, the employment of part-time, temporary and home workers, new forms of compensation, the frontiers of union organizing, and human resource management in the global economy. Through the discussion of selected readings and cases as well as class debates, students develop and appreciation of the complexity and importance of these and other emerging issues. 7 weeks

MGMT 5402 DISCRIMINATION IN EMPLOYMENT

This course examines inappropriate and illegal discrimination in the contemporary workforce. Topics include discrimination in recruitment, selection and promotion, sexual harassment, the "glass ceiling" effect, and discrimination in compensation. Through the discussion of selected readings and cases as well as class debates, students develop and appreciation of

the complexity and importance of these and other emerging issues. 7 weeks

MGMT 5783 GLOBAL BUSINESS SEMINAR

An intensive course, Global Business Seminar combines lectures, readings and discussion at Clark University with a week of instruction by Clark faculty and resident business executives and guest lecturers in a foreign capital city. Current global business events are examined in the context of economic and political policy and management experience. Several class sessions are held on campus, followed by a week of seminars and Weld trips in a foreign center of commerce. (Prerequisites: FIN 4201, MKT 4401) 14 weeks

MGMT 5790 NEW VENTURE MANAGEMENT

The entrepreneur encounters a unique set of problems in planning and developing a new business venture. This course emphasizes the skills needed to analyze existing markets and identify unexploited business opportunities. Topics include developing business plans, identifying financing strategies, and managing start-up operations. Students are exposed to entrepreneurial organizations and problems through case studies, Weld consultations with small-business managers, and class presentations by entrepreneurs. (Prerequisites: FIN 4201, MGMT 4301-4304, MKT 4401) 14 weeks

MGMT 5792 MANAGEMENT CONSULTING PROJECTS

This course is organized around projects provided by a variety of profit and nonprofit organizations in central Massachusetts and Boston. Teams of three to four second-year MBA students are invited to work in these organizations as consultants in training. Working with guidance from Clark faculty members and managers from the host organizations, the student teams analyze their assigned projects and recommend courses of action. Management, in turn, critically evaluates and responds to the students' analysis and recommendations, in much the same manner that they respond to proposals from their own staff. (Prerequisites: required core courses) 14 weeks

MGMT 5793 STRATEGIC MANAGEMENT OF TECHNOLOGY

This course focuses on the technology dimension of competitive strategies and strategy-making processes. Through cases and readings, strategic management concepts are used to analyze those critical points where technology intersects other processes and functions of the business firm. The perspective taken is that of the non-technically trained manager dealing with technology issues of strategic importance to the firm. (Prerequisites: FIN 4201, MGMT 4301-4304, OM 4601) 14 weeks

MGMT 5900 GLOBAL ENTREPRENEURSHIP

Entrepreneurial opportunities in international markets have exceptional possibilities. However, in these uncertain economic times, the potential risks are also significant. This course explores these entrepreneurial opportunities from a global perspective. The students will divide into teams and develop a feasibility study for starting a moderate-size venture in an international environment. The teams will work together and research the essential components of a feasibility study through traditional research, Internet research, e-mail correspondence, and, when possible, meeting with appropriate counselor representatives. The students will also analyze written international case studies, give several brief presentations, and present the final feasibility analysis as the term project. This course is offered as a special topics class. (Prerequisites: FIN 4201, MKT 4401, and MGMT 4301-4304) 14 weeks

MGMT 5900 SPIRITUALITY AND BUSINESS

There has been a recent explosion of books, tapes, and videos on the topic of spirituality and business. At their roots are the beliefs that: (1) everyone is spiritual for we are composed of mind, body and spirit; (2) everyday business life has gone stale for many people because their spirit is not engaged in what they do; and (3) engaging our spirit at work will improve our relationship to what we do and to each other, and ultimately, will improve the bottom line. The course explores this concept through readings and discussions of spirituality in the

context of the individual, work group, and organization. It is different than other courses in that we will engage in spiritual, nonsectarian practices and rituals during class sessions. There are no prerequisites for this class other than an open mind. This course is offered as a special topics class and counts as a free elective in the MBA program. 14 weeks

MGMT 6000 GLOBAL BUSINESS TEAMS

Today's global market demands MBA graduates who can achieve excellence in a team environment. This course is designed to give you the skills needed to work effectively as a team member and leader. Our emphasis will be on active learning. Cases and exercises will help you to develop your team skills and provide you with insights into the problems faced by real-world teams. The influence of emerging team structures, including virtual teams in which members may never actually meet each other, will be explored through simulations and demonstrations of communication technology. Guest speakers from corporations located in Boston and Worcester will bring additional outside perspectives on the challenges of managing teams in a global environment. This course is offered as a special topics class. (Prerequisite: MGMT 4301-4304 or HRM 4300/MGMT 4300) 7 weeks

MGMT 6000 MANAGING CHANGE AND CONFLICT

Change and conflict are inevitable, as organizations enter the twenty-first century and face globalization, technological innovation, and demographic change. This course will address the challenge of managing conflict and change from a pragmatic perspective. Formal organization development interventions will be discussed, as well as the day-to-day changes that every manager experiences. Concepts such as employee involvement, organization culture, power and politics, and the learning organization will be introduced and applied. Course requirements include planning an actual organizational change, oral and written case analyses, and active participation. (Prerequisite: MGMT 4301-4304) 7 weeks

MGMT 6000 LEARNING BY ANALOGY

This course will use a variety of mediums (movies, art, literature, nature, poetry, music among others) to explore management concepts. Students will be required to make presentations in each class session using the assigned medium as a basis for examining how organizations and the people in them function. The course focuses on developing an ability to think creatively about management, and to draw lessons from multiple venues. (Prerequisite: MGMT 4301-4304) 7 weeks

MGMT 6000 NEGOTIATION AND CONFLICT RESOLUTION

This skill-building course is designed to help students improve their negotiation and dispute resolution techniques. Students will study the psychological concepts and theories of negotiation. They will also explore their own personal negotiation and conflict resolution styles. The course relies heavily on the use of role-playing exercises, case studies and class discussions. Topics studied will include distributive and integrative bargaining, communication and persuasion, power, conflict and intergroup/international negotiation. 7 weeks

MKT 4401 MARKETING MANAGEMENT

This course provides the fundamental marketing principles and practices underlying a successful business enterprise. Students will learn the tools, concepts, analytical frameworks, and skills for making marketing decisions and designing marketing programs. The course covers the processes and activities involved in effective marketing, as well as the strategic implications of being market-driven. A fundamental goal of the course is to improve students' critical thinking and decision-making skills by requiring students to make and defend marketing decision in the context of realistic, case-oriented problem situations. Topics include: segmentation, targeting, positioning, competitive strategy, product development, pricing, promotion, and distribution. (Prerequisites: ECON 4004, STAT 4006) 7 weeks

MKT 4402 MARKETING STRATEGY AND SIMULATION

This course utilizes a computer simulation to provide direct, hands-on experience of managing a business. In applying concepts and strategies learned in MKT 4401 to a practical, “real world” environment, students will come to appreciate the importance and value of marketing as the primary competitive tool and will gain direct exposure to the opportunities, challenges, problems and decisions involved in market-driven management. They will also learn the importance of making trade-offs in finding the optimal combination of marketing mix elements (and product/inventory decision) necessary to run a successful business enterprise. Experiential learning from the competitive game may be supplemented by case discussions and readings on competitive marketing strategy development. (Prerequisite: MKT 4401) 7 weeks

MKT 5401 MARKETING RESEARCH

This course examines the basic concepts and techniques used in marketing research as a problem solving aid in decision making in marketing. Problem definition, research design, types of information and measurement scales, and evaluation and utilization of secondary data with emphasis on electronic access are discussed. Students are trained in the basic methods of primary data collection, including structured and unstructured interviews, focus groups and surveys. Practical and intensive applications on sample size, questionnaire design, data analyses, and interpretation are emphasized, as well as discussion of advanced multivariate techniques for inputting and analyzing data using the SPSS statistical package. (Prerequisite: MKT 4401, STAT 4006) 14 weeks

MKT 5402 CONSUMER AND INDUSTRIAL BUYER BEHAVIOR

Understanding consumer behavior is essential to defining and maintaining a market. This course examines the purchasing behavior of individuals and groups. Topics include: com-

plex decision-making models, buying habits, attitude theory, and the buying behavior of organizations. (Prerequisite: MKT 4401) 14 weeks

MKT 5403 ADVERTISING AND PROMOTION

Promotion, a component of the marketing mix, is any form of communication intended to inform, persuade, or remind people of products or services. Advertising is any form of impersonal communication of ideas, goods, or services paid for by an identified sponsor and is one of the major types of promotion. The course focuses on advertising and publicity as the most common and useful forms of promotion. The course integrates international, legal, and ethical aspects of promotion and covers topics such as media selection, public relations, and personal selling. (Prerequisite: MKT 4401) 14 weeks

MKT 5404 SALES AND SALES MANAGEMENT

Sales management integrates personal selling and marketing management, with emphasis on relationship selling. The course focuses primarily on industrial rather than retail sales. Topics include techniques of personal selling; recruiting, training, organizing and motivating the sales force; compensation; forecasting; budgeting; and control. Legal and ethical issues are discussed. (Prerequisite: MKT 4401) 14 weeks

MKT 5405 BUSINESS-TO-BUSINESS MARKETING

Organizations that market to other organizations encounter different problems than those that market to consumers. Business-to-business marketing is the marketing of goods and services to commercial enterprises, governments, and nonprofit institutions. Emphasis is on the buyer behavior and the more complex decision-making processes of organizations. Topics covered include industrial market segmentation, product development, pricing, personal selling, promotion, and distribution. Additional topics are direct marketing, research and development, purchasing, and corporate planning. (Prerequisite: MKT 4401) 14 weeks

MKT 5406 MARKET PRICING

A pricing strategy should be consistent with and reflect overall company objectives. Companies can use pricing strategies to gain market share, meet profit goals, or maintain the status quo. Companies may pursue more than one pricing objective at the same time and often re-examine pricing strategy in light of changes in the competitive environment. This course presents a management approach to pricing products and services in consumer, industrial, and reseller markets. Topics include: bargaining tactics, bidding strategies, pricing product lines for complex channels of distribution, life cycle and learning curve pricing, and intrafirm transfer pricing. (Prerequisite: MKT 4401) 14 weeks

MKT 5407 SERVICES MARKETING

Highly competitive markets for profit and non-profit service organizations require strict attention to the production/marketing interface, as well as to the traditional marketing mix. The course focuses on the marketing implications of service intangibility, the inseparability of production and consumption, and conflicting server roles. These problems apply to a wide array of service organizations, including retailing and health care. Current models of the service organization are presented with insight developed through readings, cases, and interviews. (Prerequisite: MKT 4401) 14 weeks

MKT 5482 INTERNATIONAL MARKETING

This course examines the problems that firms encounter as they enter international markets. The text and readings explore marketing problems facing joint venture and multinational firms, as well as the exporter and licensor. A range of marketing activities is covered in the context of international operations, including marketing research, product policy, pricing, distribution, promotion, planning, organization, and control. (Prerequisites: MKT 4401; MGMT 4707) 14 weeks

MIS 4501 MANAGEMENT INFORMATION SYSTEMS

One of the most important aspects of computing, management information systems has had

a significant effect on both operations and strategy. Information systems are employed at all levels of management to achieve competitive advantage and to create new opportunities, products, and services. The objective of this course is to provide basic knowledge of the field of information systems. Topics include hardware, software, database management, data communication, systems analysis and design, and functional application areas such as medicine, accounting, and manufacturing. 7 weeks

MIS 5601 DATABASE MANAGEMENT SYSTEMS

Database management systems play an important role in meeting the information needs of an organization. A poorly designed database may result in providing incomplete, wrong, and anomalous information. The primary objective of this course is to study the techniques used in designing databases that provide the correct information to non-technically oriented users. Other topics include distributed databases and expert systems. (Prerequisite: MIS 4501) 7 weeks

MIS 5602 DECISION SUPPORT SYSTEMS

Optimization modeling techniques can potentially be used to address a wide range of management problems. Application of these techniques in today's business environment requires robust, microcomputer-based software to solve the models. In this course, students learn various optimization modeling techniques; software for solving models; and cases of how companies have developed and used optimization-based decision support systems to address real-world problems. (Prerequisite: OM 4601) 7 weeks

MIS 5503 TELECOMMUNICATION SYSTEMS

Telecommunication technologies have made a lasting impact on the manner in which information is transmitted within and among organizations. This course provides students with a working knowledge of the technical and managerial aspects of communication systems. On completion of the course, students will be able to analyze the types and components of communication systems, and make an extensive comparison of the different types. (Prerequisite: MIS 4501) 7 weeks

MIS 5504 SOFTWARE METHODOLOGIES

Programming methods used in the development of Information Systems (IS) software range from third-generation to the more recent object-oriented ones. This course examines the methodologies that are periodically in use, with the aim of imparting to students the ability to select the one that best suits the requirements of a particular IS. Topics include visual, object-oriented, client-server and Internet programming. (Prerequisite: MIS 4501 or MIS 4500) 14 weeks

MIS 5505 MANAGEMENT OF INFORMATION TECHNOLOGIES

To effectively plan the Information Technology (IT) needs of an organization, managers must assess the impact of IT and the role it plays in the context of organizational strengths and goals. Through the use of case studies, this course is designed to provide students the insight required to make such appraisals. (Prerequisite: MIS 4501) 14 weeks

MIS 5900 ELECTRONIC COMMERCE

This course focuses on the explosive field of Electronic Commerce. E-commerce is the buying and selling of goods and services on the Internet, especially the World Wide Web. This class is a complete introduction to the world of electronic commerce, including balanced coverage of technical and business topics. Case studies and plentiful business examples complement conceptual coverage to provide a real-world context. Implementation strategies are analyzed, using examples of both successful and unsuccessful implementations. Additionally, this course will prepare the student to understand the steps an organization must take to effectively use e-commerce to achieve a competitive advantage in this exciting and new marketplace. Students shall develop web pages of their own to market hypothetical products using either FrontPage 2000/1998 or hypertext markup language (HTML). This course is offered as a special topics class and will count as an elective in the MIS concentration. (Prerequisite: MIS 4501) 14 weeks

MIS 5900 WEBSITE DEVELOPMENT

This course covers all aspects of website design, from creative design to professional management. Electronic commerce issues will be looked at in depth. Students will work with and learn HTML and Java Scripting, including the introductory components of CGI and Web Site Pro server hosting software. Students taking this class will need to have web server access with a minimum of 2 MB hosting space available through their ISP and should be familiar with personal computers. All work will be done using the Windows 95/98 operating systems. This course is offered as a special topics class and will count as an elective in the MIS concentration. (Prerequisite: MIS 4501) 14 weeks

OM 4601 OPERATIONS MANAGEMENT

Operations management involves the efficient use of resources to create goods or services that satisfy the needs of customers and clients. In both the profit and nonprofit sectors, successful management requires economically rational decisions regarding the design and operation of processes that transform such resources into goods or services. The course develops students' abilities to identify and structure operating problems and to identify appropriate techniques for resolving them. Examples of topics covered include: modeling concepts and LP modeling/solution methods, basic forecasting methods, location selection, inventory management, MRP, JIT, quality management/assurance, project management and control. (Prerequisites: MATH 4003 or math entrance requirement fulfilled, STAT 4006, MIS 4501) 7 weeks

OM 5601 OPTIMIZATION FOR MANAGERS

This course provides an overview of important, practical tools that have been used to solve management problems. Explanation of the fundamental ideas behind these techniques will help students to apply them intelligently and flexibly to situations in the real world. Examples of the techniques are heuristics, simulation, shortest path, network models, dynam-

ic programming, and so on. Thanks to desktop computers and user-friendly software, managers can now use these techniques themselves, a particularly attractive feature for small entrepreneurial firms. (Prerequisite: OM 4601) 14 weeks

OM 5602 APPLIED BUSINESS FORECASTING

Accurate forecasts of sales revenues, quantities sold, prices, production capacity, market size and share, inventory levels, personnel requirements, and many other business measures are important for making good management decisions. Applied forecasting projects are drawn from marketing, finance, economics, organizational behavior, strategy, and operations management to illustrate methodologies. Forecast projects are drawn from current local businesses or a special field of interest. Topics include forecasting with simple and multiple regression, time series analysis including classical and ARIMA methods, and exponential smoothing models. (Prerequisite: STAT 4006) 14 weeks

OM 5603 OPERATIONS TECHNOLOGY MANAGEMENT

To compete in the growing international marketplace, firms must be able to compete on the basis of manufacturing costs, productivity, and product quality. Production managers face complex decisions as they try to balance productivity and quality against cost. This course compares traditional manufacturing methods and emerging trends such as Just-in-time, Flexible Manufacturing Systems, Total Quality Management, and Computer Integrated Manufacturing. (Prerequisite: OM 4601) 14 weeks

STAT 4005 STATISTICAL METHODS

This is a first course in applied statistics. No prior knowledge of statistics is assumed. The course is divided into two sections. The first section covers the basics of data analysis and presentation, probability theory, and applied probability. The second sections covers confidence tests and statistical regression. There are exams after each section. (Prerequisite: MATH 4003 or math entrance requirement fulfilled) 7 weeks

STAT 4006 MANAGEMENT DECISION MODELS

This course focuses on model building using multiple regression analysis. The resulting models are used to aid management decision-making. Exercises and cases involve a wide range of management problems. (Prerequisite: STAT 4005) 7 weeks

Directed Research

A student may take one course in which he or she performs independent research on a selected topic under the guidance of a faculty sponsor who is expert in the area. Once the sponsor and the assistant dean for academic affairs approve a directed research project, the student will work independently to achieve the goals established. Directed research may fulfill a requirement for a concentration.

Special Topics

Special topics are offered when an area of interest to faculty and students requires a more in-depth treatment than that given in the regularly scheduled classes because of new developments in business research or practice. Special topics are often offered for more than one semester, and may be added to the regular catalog of courses, depending on the nature of the topic.

Capstones

In the final stages of the MBA curriculum, each student must complete a course that integrates their academic program and provides a professional, cross-disciplinary, career-building experience. Students have the opportunity to apply their academic skills to the world of practice through courses such as Management Consulting Projects (CAP 5792), Entrepreneurship (CAP 5900), and Global Business Seminar (CAP 5783). Students enrolled in the Health Care Management concentration must take Applied Field Project (CAP 4808) to fulfill the capstone requirement; students in other concentrations choose from capstone options that best complement their selected area of focus.

MATHEMATICS

Department Faculty

- Lawrence E. Morris, Ph.D., chair:
automorphic representations, algebraic geometry
- Laura T. Bernhofen, Ph.D.: *statistics, ranking and selection*
- Jerry Breecher, Ph.D.: *performance evaluation*
- Arthur Chou, Ph.D.: *complexity theory, algorithms*
- Frederic Green, Ph.D.: *computational complexity, theory of computation, quantum computing*
- Li Han, Ph.D.: *computer simulation, software engineering, robotics, computer animation*
- David Joyce, Ph.D.: *knot theory, computer science, combinatorics, history of mathematics*
- John F. Kennison, Ph.D.: *topology, category theory*
- Lee Rudolph, Ph.D.: *knot theory, low-dimensional topology, algebraic geometry, visualization*
- Natalia Sternberg, Ph.D.: *applied mathematics, differential equations, scientific computing*

Adjunct Faculty

- Harvey Gould, Ph.D.: *computer simulation*

Undergraduate Programs

The department supports undergraduate majors and minors in computer science and in mathematics. The computer science program is described in the Computer Science portion of this catalog. The department also offers courses that play an important role in other disciplines.

The Mathematics Major

In keeping with liberal arts traditions, Clark's mathematics major provides a solid education in mathematical principles for students who wish to apply mathematics in other fields and students who wish to pursue mathematics in graduate school. Clark mathematics majors have gone on to graduate school in pure mathematics, applied mathematics, and computer science at such universities as Brown, Cornell, Johns Hopkins, and NYU (Courant Institute). Graduates are employed in the public and private sectors as statisticians, mathematical mod-

ellers, and actuaries, as well as teachers from the elementary to university level.

The mathematics major, built around a core of fundamental courses, is best started early with Calculus or Honors Calculus in the first year. Advanced electives provide some flexibility and allow students to tailor the major to their needs. Following the description of the requirements are suggestions for concentrations in pure mathematics, applied mathematics, and actuarial science

Department faculty are eager to help students select courses. If a major has not been declared earlier, it must be declared by the end of the sophomore year. Students should choose an academic advisor from the department faculty as early as possible, and in any case by the end of the sophomore year.

Requirements

Core Courses:

- These courses are prerequisites for the advanced courses and should be taken as soon as possible.
- Calculus (Math 120-121 or Math 124-125), two courses
 - Linear Algebra (Math 130)
 - Multivariate Calculus (Math 131)
 - Introduction to Modern Analysis (Math 172)

Breadth Courses

- Modern Algebra (Math 225)
- Two math electives (Math 105, 114, 115, or any courses beyond Math 125)

Depth Courses

Four additional courses at the 200 level, one a capstone course to be selected with the major advisor (internships and reading courses will meet this requirement only with departmental approval)

(Total twelve courses)

Suggested Specializations in Mathematics

Pure mathematics is the study of mathematics as an end in itself. Many students are originally attracted to mathematics because of its powerful applications, but a taste for pure mathematics often develops after studying the subject.

Students planning to study mathematics in graduate school should consider programs in either pure or applied mathematics. Suggested courses: Math 214 (Modern Analysis); Math 216 (Complex Analysis); Math 226 (Modern Algebra II); and Math 228 (Topology).

Applied mathematics is the study of mathematics as applied to the natural or social sciences. The heart of the field is modelling—translating aspects of natural or social phenomena into mathematical objects that can be studied with such mathematical tools as differential equations, linear systems, and stochastic processes. Suggested courses: Math 212 (Numerical Analysis); Math 214 (Modern Analysis); Math 216 (Complex Analysis); Math 217-218 (Probability and Statistics and Topics in Statistics); and Math 244 (Differential Equations).

Actuarial science is the study of finance and insurance. Study in this field requires a grounding in mathematics and statistics and an understanding of economics and business management. Suggested courses: Math 212 (Numerical Analysis); Math 217-218 (Probability and Statistics and Topics in Statistics); Math 244 (Differential Equations); and appropriate courses in economics or business management.

Honors Program

A major who maintains at least a 3.2 average (4.0 scale) in courses required for the major may apply for the departmental honors program. A student's application in writing must be directed to a prospective honors advisor or the department chair by the end of the student's junior year. Honors may be achieved in one of two ways:

1. A unified four-course sequence as a senior (some parts of which may consist of reading courses), followed by a comprehensive examination.
2. An honors project to be presented at an oral defense or at a department seminar. This project may be an independent or joint research thesis, or it may be a programming project. Supporting course work may be required.

Students interested in pursuing the honors program should consult their department advisor. The student registers for Math 299, Sec. 8, for course credit for an honors thesis.

Upon satisfactory completion of the program, the department may recommend graduation with honors, high honors, or highest honors.

The Mathematics Minor

The mathematics minor consists of six courses: Math 120-121 (Calculus I and II) or Math 124-125 (Honors Calculus I and II), Math 130 (Linear Algebra), Math 131 (Multivariate Calculus); and two other mathematics courses (excluding Math 113 and Math 119), at least one of which must be 200-level. (Reading courses and internships are accepted only with departmental approval.) The two elective courses depend on the student's interest. For instance, a student interested in the physical sciences could take Math 172 (Introduction to Modern Analysis) and Math 244 (Differential Equations), while Math 217-218 (Probability and Statistics and Topics in Statistics) might be more appropriate for social sciences. See the department for further suggestions.

Secondary Education Certificate in Mathematics Education

Certificate requirements include courses in education and in mathematics. Consult the Education Department for information on required courses in education and the most recent state guidelines. The mathematics department recommends the completion of a regular math major, with Math 126 (Elementary Number Theory) and Math 128 (Modern Geometry) included as the two elective Breadth Courses.

Mathematical Services

The mathematics department offers courses to help students using mathematics as a tool for studying other areas; see Math 113 (Mathematical Problem Solving) and Math 217-218 (Probability and Statistics, and Topics in Statistics). Outside the department, COPACE offers IDND 17 (Foundations of Quantitative Thinking).

Calculus

Calculus is an essential tool for any serious student of mathematics or the natural sciences. It also is used in economics and other disciplines. The Department of Mathematics offers two calculus tracks:

- Math 120-121 Calculus
- Math 124-125 Honors Calculus

Students normally start calculus with Math 120 (Calculus I) or Math 124 (Honors Calculus I); both are open to first-year students with appropriate scores on the placement test. Strong students with an interest in the physical sciences are urged to start with Math 124, Honors Calculus I. Even if you have shown sufficient achievement for Advanced Placement, based on the AP test administered in high school, the Mathematics Department generally recommends that you take calculus at Clark; in exceptional circumstances, first-year students may enroll in more advanced courses such as Math 130 or Math 172

Mathematics Placement Test

All students who intend to take mathematics courses or who need to satisfy the University's mathematics proficiency requirement (with the exception of students with Advanced Placement credit in calculus) must take the mathematics placement test, given during orientation and preregistration. Based on placement test scores, some students will be required to pass IDND 17 (Foundations of Quantitative Thinking) before they enroll in a Formal Analysis course. Other students, who place at levels ranging from precalculus through Math 124, must begin in a course corresponding to their placement test scores. This course must not be higher or lower than the test score indicates. Students may challenge their placement by taking backup placement tests. (For more information about the University's mathematical and quantitative thinking requirements, see page 6.)

Mathematics Courses

105 HISTORY OF MATHEMATICS/LECTURE, DISCUSSION

Explores major themes—calculation, number, geometry, algebra, infinity—and their historical development in civilizations ranging from the antiquity of Babylonia and Egypt through classical Greece, the Middle and Far East, and then modern Europe. Analyzes the tension between applications of mathematics and the tendency toward formalism. Emphasizes presentations and discussions. Satisfies the historical perspective. Mr. Joyce/Offered periodically

113 MATHEMATICAL PROBLEM SOLVING/LECTURE, WORKSHOP

Intended for students who will use mathematics in such subjects as management and the social sciences, but who are not necessarily planning to go on to calculus. Math 113 cannot be used as a prerequisite for Math 120, and does not satisfy any requirement of either the major or the minor in mathematics or computer science. Covers some "pre-calculus" topics (algebraic manipulations, functions and graphs, exponentials and logarithms), but major emphasis is on mathematical analysis of concrete situations (word problems, mathematical modeling, exponential growth, applications of linear systems, elementary probability). Prerequisites: A suitable score on the mathematics placement test. Staff/Offered every semester.

114 DISCRETE MATHEMATICS/LECTURE

Covers mathematical structures that naturally arise in computer science. Includes elementary logic and set theory, equivalence relations, functions, counting arguments, asymptotic complexity, inductively defined sets, recursion, graphs and trees, Boolean algebra and combinatorial circuits, finite state automata, and diagonalization and countability arguments. Emphasizes proofs and problem solving. Prerequisite: One semester of calculus (Math 120 or 124) or CSci 101. Mr. Chou, Mr. Green, Mr. Joyce/Offered every semester

119 PRE-CALCULUS MATHEMATICS/LECTURE, DISCUSSION

Intended for students who plan to go on to calculus. Math 119 is to be used, when necessary, as preparation for Math 120, and does not satisfy any requirement of either the major or the minor in mathematics or computer science. Students should have a solid grasp of elementary algebra. Covers more advanced algebraic techniques (linear and nonlinear inequalities, quadratic equations, linear systems) and gives a rigorous look at elementary functions (polynomial, exponential, logarithmic, trigonometric). Prerequisites: A suitable score on the mathematics placement test. Staff/Offered every Spring.

120 AND 121 CALCULUS I AND II/LECTURE, DISCUSSION

Part I includes functions, limits, continuity, differentiation of algebraic and trigonometric functions, mean value theorem, and various applications. Part II includes motivation for, and definition of, Riemann sums and integrals; techniques and application of integration; improper integrals; transcendental functions (logarithms, exponential functions, and inverse trigonometric functions); series and Taylor series. Though not all results are derived rigorously, care is taken to distinguish intuitive arguments from rigorous proofs. Calculus is essential for majors in biology, chemistry, computer science, mathematics, physics, and Environmental Science and Policy. Math 120 and 121 fulfill the formal analysis requirement. Prerequisite: Appropriate score on the mathematics placement test, or appropriate grade in Math 119. Mr. Kennison, staff/Offered every fall (120) and spring (121)

124 AND 125 HONORS CALCULUS I AND II/LECTURE

Two-course sequence for majors in mathematics, physics, and other physical sciences. Offered in coordination with the Department of Physics. Ordinarily, students take Math 124 simultaneously with Physics 120 Introductory Physics, Part I, and Math 125 simultaneously with Physics 121 Introductory Physics, Part II;

with the instructors' permission, students may enroll in Math 124/125 without Physics 120/121. Previous experience with calculus is helpful but not required. Mathematical rigor and physical intuition are both emphasized. In addition to the subject matter of Math 120/121, this course introduces topics such as Riemann-Stieltjes integration, elementary differential equations, theory of plane curves, calculus of variations, and Fourier analysis. Fulfills the formal analysis requirement. Prerequisite: An appropriate score on the mathematics placement test. Corequisite: Physics 120/121 (see above) or permission. Mr. Morris, Mr. Rudolph/Offered every year

126 ELEMENTARY NUMBER THEORY/LECTURE

Introduces number theory and trains students to understand mathematical reasoning and to write proofs. Includes the unique factorization of integers as products of primes, the Euclidean algorithm, Diophantine equations, congruences, Fermat's theorem, and Euler's theorem (and some applications: calendar problems, magic squares, cryptology). Prerequisite: Math 114, or one semester of Calculus (Math 120 or 124), or permission. Mr. Morris/Offered periodically

128 MODERN GEOMETRY/LECTURE

Recalls Euclidean geometry and then proceeds to modern related topics: Hilbert's axioms; hyperbolic (Lobachevskian), elliptic, and projective geometries, and philosophical implications of geometries without the Parallel Postulate; finite geometries; automorphism groups (Klein's Erlanger Programme). One aim is to show the beauty of deduction in mathematics. Prerequisites: high school geometry, and either a semester of college mathematics or permission. Mr. Joyce, Mr. Rudolph/Offered periodically

130 LINEAR ALGEBRA/LECTURE, LABORATORY

A prerequisite for Math 131 Multivariate Calculus and a requirement for all mathematics majors; highly recommended for all computer science majors. Topics include vector spaces, systems of linear equations, linear transformations, dual spaces, eigenvectors and eigenval-

ues, determinants, and bilinear forms. Possible additional topics include applications to computer graphics, linear regression (least squares), Fourier series, and differential equations. Meets four hours a week. Prerequisite: Math 121 or 125. Mr. Rudolph, Ms. Sternberg/ Offered every fall

131 MULTIVARIATE CALCULUS/LECTURE, DISCUSSION

A continuation of Calculus (Math 120-121 or 124-125) and Linear Algebra (Math 130), drawing heavily on both. Topics include partial differentiation, multiple integration, and theory and practice of integration over parametrized curves and surfaces, culminating in Stokes' Theorem. Possible additional topics include treatments of Kepler's Laws, the brachistochrone, and isoperimetric problems. Meets four hours a week. Prerequisites: Math 121 (or 125) and Math 130. Mr. Rudolph, Ms. Sternberg/Offered every spring.

172 INTRODUCTION TO MODERN ANALYSIS/LECTURE

Modern analysis provides a language and unifying framework for theories encountered throughout mathematics. In this course, students learn to understand, formulate, and prove mathematical statements. Ideas first encountered in calculus—convergence, completeness, and integration—are studied in depth. Other topics include metric spaces, normed spaces, compactness, and measure theory (Lebesgue integration). Required for mathematics majors by the junior year, and earlier if possible. Should be taken either simultaneously with, or after, Math 130. Mr. Chou, Ms.Sternberg/Offered every year

181 MATHEMATICAL THEORY OF COMPUTATION

See Computer Science 270. Mr. Chou, Mr. Green/Offered every other year

201 PROSEMINAR IN MATHEMATICS/SEMINAR

Senior undergraduates study and speak on topics in mathematics to become acquainted with diverse subjects, learn to research known topics, and get practice in presenting presenting mathematics to peers. Faculty present their research areas. Possible topics include: category

theory, knot theory, automorphic forms, topos theory, low-dimensional topology, class field theory, group representation theory, and dynamical systems. This is a capstone course in mathematics. Staff/Offered periodically

212 NUMERICAL ANALYSIS/LECTURE, LABORATORY

Introduces concepts and techniques of scientific computing to students in mathematics, computer science, and the sciences. Teaches how to set up reasonable computational algorithms and use the algorithms to work on actual projects. Topics include approximation theory, error analysis, numerical differentiation and integration, and solution of ordinary differential equations and linear systems. Prerequisites: Math 130 and Math 172. Mr. Chou, Ms. Sternberg/Offered every other year

214 MODERN ANALYSIS/LECTURE

Ideas introduced in Math 172 are developed and applied to scientific models. Topics include Hilbert spaces, L_p spaces, Fourier series, Weierstrass approximation theorems, and linear operators. Prerequisites: Math 130 and Math 172. Mr. Chou, Ms. Sternberg/Offered every other year

216 FUNCTIONS OF A COMPLEX VARIABLE/LECTURE

Designed for undergraduate science and mathematics majors. Includes Cauchy's theorem, power series, Laurent series, the residue theorem, harmonic functions, and physical applications, such as problems in two-dimensional flow. An introduction to Riemann surfaces if time permits. Prerequisite: Math 131 and Math 172. Mr. Rudolph/Offered periodically

217 PROBABILITY AND STATISTICS/LECTURE

An introduction to probability theory and mathematical statistics that emphasizes the probabilistic foundations required to understand probability models and statistical methods. Topics covered will include the probability axioms, basic combinatorics, random variables and their probability distributions, mathematical expectation and common families of probability distributions. Prerequisite: Math 131. Ms. Bernhofen/Offered every year.

218 TOPICS IN STATISTICS/LECTURE

The emphasis of this course is to develop the fundamental statistical concepts of inference and hypothesis testing from a classical perspective using the tools of probability theory.

Topics investigated include sampling and sample distributions, graphical data analysis, point and interval estimation, hypothesis testing, and an introduction to Bayesian inference.

Prerequisite: Math 217 or Econ 260.

Ms. Bernhofen/Offered periodically.

225 MODERN ALGEBRA I/LECTURE

In the 19th century, Kummer introduced "ideal numbers" to salvage unique factorization of integers into primes (which breaks down in some rings of algebraic integers). This course discusses unique factorization and the modern theory of rings and their ideals, emphasizing Euclidean domains. Other algebraic structures (groups, fields) also are introduced. Required for all mathematics majors. Prerequisite: Math 130. Mr. Kennison, Mr. Morris, Mr. Joyce/
Offered every year

226 MODERN ALGEBRA II/LECTURE

In the early 1800s, Abel showed that a general equation of degree at least 5 cannot be solved by extracting roots. Today, group theory, developed by Galois to determine which equations are solvable, is used throughout mathematics, and in much of physics and chemistry. This course focuses on groups and Galois theory. Other possible topics include canonical forms of matrices and modules. Prerequisite: Math 225. Mr. Kennison, Mr. Joyce, Mr. Morris/
Offered every other year

228 TOPOLOGY/LECTURE

Homology theory is the proper context for Stokes' theorem (Math 131). This course continues the study (begun in Math 131 and Math 172) of the topological properties of subsets of Euclidean space, developing algebraic tools like homology and fundamental groups. Further topics may include fixed-point theory, the Jordan curve theorem, and knot theory.

Prerequisites: Math 131 and Math 172.

Mr. Rudolph/Offered every other year

244 DIFFERENTIAL EQUATIONS/LECTURE

Most ordinary differential equations occurring in mathematical models of physical, chemical, and biological phenomena cannot be solved analytically. Numerical integrations do not lead to a desired result without qualitative analysis of the behavior of the equation's solutions. This course studies the flows of scalar and planar ordinary differential equations. Stability and bifurcation are discussed.

Prerequisite: Math 130 and Math 172.

Ms. Sternberg/Offered every other year

Computer Science

Courses in computer science are listed in the Computer Science section.

MUSIC

(See Visual and Performing Arts).

PHILOSOPHY

Program Faculty

Walter Wright, Ph.D., chair: 19th-century philosophy, ethics, philosophy of religion, metaphysics, German idealism

Judith DeCew, Ph.D.: theoretical and applied ethics, philosophy of law, social and political philosophy, logic

Patrick Derr, Ph.D.: philosophy of science, biomedical ethics, history of modern European philosophy, ethical issues in hazards management

Scott Hendricks, Ph.D.: philosophy of mind, epistemology, philosophy of psychology, action theory, logic

Gary Overvold, Ph.D.: contemporary continental philosophy, interdisciplinary studies, epistemology, cultural history, modernism

Michael Pakaluk, Ph.D.: ancient philosophy, analytic philosophy, Hume, philosophy of psychology, philosophy of love and friendship, logic

Part-time Faculty

Barbara Carlson, C.Phil.

Affiliate Faculty

Bernard Kaplan, Ph.D.

Christina Sommers, Ph.D.

Undergraduate Program

The Philosophy Department offers an undergraduate major program in philosophy, a concentration in ethics and public policy, a minor in philosophy, and a variety of elective courses which non-majors may take to broaden their education and fulfill Program of Liberal Studies requirements.

The Philosophy Major

The requirements for a major in philosophy are designed to ensure exposure to the major systematic fields in philosophy, to ensure familiarity with advanced analytic and logical methods, to acquaint the student with the history of the discipline, and to provide close faculty-student contacts through advanced seminars and individual research projects. The major program accommodates both general Liberal Arts students as well as double majors, and those students pursuing honors work as well as those considering graduate study in Philosophy. Students, especially those considering graduate school, who wish a more intensive course of study toward the major should consult with department faculty and study the philosophy major handbook in the department office.

Major requirements

1. Required courses in philosophy

One course in formal logic (110)

Two courses in the history of philosophy (141, 142, 143, or 145)

One advanced course in the area of metaphysics (234 or 235)

One advanced course in the area of epistemology (240 or 241)

One advanced course in the area of ethics and social philosophy (220, 221, or 228)

One advanced elective or above, chosen to complement the student's second major or intended professional field

A designated Capstone Seminar

2. Required courses outside philosophy

Either: (i) a completed double major; or (ii) a completed concentration (for example, Environmental Science and Policy, Ethics & Public Policy, Womens Studies, Classics, Ancient Civilizations, Judaic Studies, or Communications); or (iii) a completed minor in any other program or department.

The Philosophy Minor

Students pursuing a minor in philosophy at Clark can choose one of two tracks. Each track requires six courses in philosophy, and each is designed to develop students' intellectual skills and to familiarize them with the fundamental methods of philosophical inquiry. Each track begins with a foundation in logic and practical ethics.

The traditional Great Issues minor track emphasizes a grounding in the history of philosophy. This track engages the student in the fundamental philosophical questions with which human beings have been perennially concerned: for example, Does God exist? How ought I to live? What is knowledge? Do human beings have free will? Can political authority be legitimated? Is there life after death?

The optional Enriched Major track emphasizes advanced work in courses related to students' majors. This track engages students in the fundamental philosophical questions which their own major fields raise but do not answer: for example, What is a mind? What is a person? What is the nature of a profession? What is science? What is justice?

Requirements for the Great Issues Minor Track

One course in logic (103 or 110)

One course in practical ethics (105, 130, 131, 132, 133, or 139)

Three courses in the history of philosophy (141, 142, 143, 145, 148, 154, or 215)

One advanced elective course (150+)

Requirement for the Optional Enriched Major Track

- One course in logic (103 or 110)
- One course in practical ethics (105, 130, 131, 132, 133, or 139)
- One course in the history of philosophy (141, 142, 143, 145, 148, 154, or 215)
- One elective course, chosen at any level
- Two advanced courses (150+) chosen to complement the student's major or pre-professional program.

Directed Readings, Individual Research, Tutorials

For significant independent research, the department offers individual Directed Research (PHIL 299.2) and Directed Readings (PHIL 299.1) courses, and Advanced Topics in Philosophy courses (PHIL 299.7). Students interested in these possibilities should consult with individual members of the philosophy faculty.

Internships, Research Apprenticeships

Students are encouraged to apply for a research apprenticeship with an individual philosophy professor. Research apprentices work closely with their mentor on the mentor's scholarly research, sometimes co-authoring a published article. Some recent topics have been: ethical issues in reproductive technology; privacy in law and ethics; and statistical stylometry and ancient philosophy. Philosophy faculty also sponsor off-campus undergraduate internship experiences. Students interested in these opportunities may inquire at the department or through the internship office.

Senior Thesis

Undergraduate majors are encouraged to complete a senior thesis (PHIL 299.8); majors intending graduate study especially should consider this. Thesis students engage in advanced individual research on a selected philosophical problem, guided by a faculty advisor and a thesis committee composed of three faculty members. See 299.8 for more information.

Honors

Honors, high honors, or highest honors in philosophy may be conferred at graduation upon majors who, in addition to having compiled a suitable record in the major, successfully defend their senior thesis in an oral presentation to their thesis committee. To be considered for Honors, a student must have at least a 3.0 overall g.p.a. combined with a higher g.p.a. in philosophy. Students who complete a thesis but do not have an adequate g.p.a., or who otherwise don't meet honors requirements, will simply receive a grade (without an honors designation) for their senior thesis.

Department Prizes and Awards, and Student and Honor Societies

Each year, the department inducts its best junior and senior philosophy majors into Phi Sigma Tau, the national philosophy honor society. At the Spring honors convocation, the department awards one or more prizes to exemplary graduating seniors. At the Fall convocation, the department confers a prize for the best work in logic by a first- or second-year student.

The Philosophy Club, a student organization, sponsors lectures, colloquia and informal educational and social activities for all interested Clark students.

Professional Organizations

The Clark University Department of Philosophy houses the New England Chapter of the Society for Philosophy and Public Affairs, a national organization that works to promote the application of philosophical methods and insights to issues of public policy. The society sponsors colloquia, symposia, and conferences. Inquiries concerning its activities may be directed to the department.

The Department is a founding member of the Boston Area Colloquium in Ancient Philosophy. The organization sponsors lectures and seminars at the various member college campuses.

Departmental Publications

The international philosophical journal, *Idealistic Studies*, is edited by Gary Overvold. Founded by Robert N. Beck, *Idealistic Studies* is a leading interdisciplinary journal focusing on issues of contemporary European philosophy and idealism.

Courses

102 INTRODUCTION TO PHILOSOPHY/ LECTURE, DISCUSSION

Introductory study of typical problems drawn from philosophy's main branches. Topics include God's existence, the nature of morality, skepticism, freedom vs. determinism, immortality, and political theory. Readings are taken from both classic and contemporary sources. Mr. Overvold, Mr. Derr, Mr. Pakaluk, Mr. Hendricks/Offered every year

103 ANALYTIC REASONING/LECTURE, DISCUSSION

Analysis of argumentative essays (drawn from newspapers, philosophical works, legal journals, and popular magazines) on such topics as affirmative action, the problem of evil, the nature of law, scientific method, etc. Students learn to read, write, and think in a more analytical and critical manner. Ms. Carlson/Offered every semester

105 PERSONAL VALUES/LECTURE, DISCUSSION

A philosophical study of some fundamental human value concerns. Students learn some important moral theories and methods used to reason philosophically about moral questions. Ms. Carlson, Ms. DeCew, Mr. Wright/ Offered every semester

106 SCIENCE, RELIGION AND REALITY/FIRST-YEAR SEMINAR

This Seminar will address some basic issues in the Philosophy of Science and the Philosophy of Religion: What is science? What is reality? How do science and religion differ with regard to the relative roles played by faith and evidence in establishing knowledge claims about reality? Does science provide better explanations than theology or literature? How do religious arguments for the existence of God differ from scientific arguments for the existence of

black holes? Special attention will be given to developing students' abilities to read complex texts, write logically, think analytically, and argue cogently. Mr. Derr/Offered every year

107 LOGIC AND LEGAL ANALYSIS/LECTURE, DISCUSSION

Gives students a strong grounding in modern logic, to use the techniques of formal logic for the analysis and evaluation of legal arguments (including examples relevant to the LSAT exam) and, generally aids students in improving their analytical skills. Ms. Carlson/Offered every year

108 PRIVACY, PROTECTION IN LAW AND ETHICS/FIRST-YEAR SEMINAR

This course will survey the history of privacy protection as it has evolved in American tort law and constitutional law. Students will analyze alternative philosophical characterizations of privacy and its scope, focusing on information, autonomy, property, and intimacy. The varied reasons for valuing privacy will be assessed and contrasting versions of the feminist critique of privacy as a tool for shielding abuse will be considered. Throughout the course, study will focus on landmark legal cases invoking privacy from the early 1900's to the present, with an eye toward understanding the scope and limits of privacy protection. Also considered will be numerous applications of privacy to moral and legal issues including the legislation of morals, drug testing, and information technologies. Ms. DeCew/Offered every year

109 LIFE/TIMES OF DAVID HUME/FIRST-YEAR SEMINAR

A study of the philosophy of the famous skeptical Scottish philosopher, David Hume. We look at his arguments denying the reality of cause and effect, laws of nature, freewill, miracles, and the existence of God. We also study replies to and criticisms of Hume's thought, especially those raised by his most formidable critic, his fellow Scotsman, Thomas Reid. Both Hume and Reid are viewed in the context of the remarkable 18th c. renaissance called the 'Scottish Enlightenment'. The

course is an excellent introduction to philosophy and to liberal studies generally, because of its emphasis on logical thought and good writing. Mr. Pakaluk/Offered every year

110 INTRODUCTION TO LOGIC/LECTURE, DISCUSSION

An introduction to modern symbolic logic with attention to its application in analysing ordinary language arguments. Mr. Pakaluk, Mr. Hendricks, Ms. Carlson/Offered every year

111 PERSONS, ROBOTS & APOCALYPSE/FIRST-YEAR SEMINAR

Examination of the place of human beings in the present world. We discuss various "modern" visions of human beings - political, scientific and religious. Readings include accounts of the Nazi holocaust, current literature in psychology, and both fiction and film exploring the idea that people are essentially machines. Mr. Hendricks/Offered every year

130 MEDICAL ETHICS/LECTURE, DISCUSSION

Investigates contemporary issues in medical ethics: informed consent, definitions of death, treatment termination and euthanasia, abortion, confidentiality and truth telling, genetic screening and counseling, research on human subjects, resource allocation, reproductive technologies, conflicts of interest, and national health policy. Not open to first-year students. Mr. Derr/Offered every year

131 ENVIRONMENTAL ETHICS

See ES123. Mr. Derr/Offered every year

132 SOCIAL AND POLITICAL ETHICS/LECTURE, DISCUSSION

Topics in social and political theory, such as equality, liberty, and justifications for political authority, as well as issues such as: What is affirmative action, and can it be morally justified? Should governments censor pornography? Is capital punishment acceptable? Can war be justified? Should morality be legislated? Ms. DeCew, Mr. Pakaluk/Offered every year

133 BUSINESS ETHICS/LECTURE, DISCUSSION

Investigates moral problems in and about the world of business: Do corporations have moral responsibilities, or is their only social responsi-

bility to increase profits? Is capitalism morally justifiable, or is some other politico-economic system morally preferable? Discusses ethical issues in advertising, affirmative action, and business's responsibilities toward the environment. Staff/Offered periodically

134 LIBERALISM AND ITS CRITICS/LECTURE, DISCUSSION

After a basic introduction to the liberal political theory of John Rawls, the course examines his recent critics to investigate whether and how conservative political thought offers a viable alternative to liberalism. Mr. Pakaluk/Offered periodically

135 EXISTENTIALISM IN PHILOSOPHY, LITERATURE, AND THE HUMAN SCIENCES/LECTURE, DISCUSSION

Explores central existential themes-such as the meaning of life, freedom and responsibility, the role of the irrational in human thought, action and expression, and the death of God in their historical, cultural, and thematic context. Existentialism is treated both as a postwar cultural event and as a view of life's meaning and possibilities. Mr. Overvold /Offered every year

136 THE LIFE AND TIMES OF DAVID HUME/LECTURE, DISCUSSION

An examination of Hume's "Enquiry Concerning Human Understanding" in relation to the Scottish Enlightenment and the criticisms of Reid. Mr. Pakaluk/Offered periodically

139 MORAL PROBLEMS IN THE PROFESSIONS/LECTURE, DISCUSSION

This course examines moral issues and dilemmas typically found in the professions, that is, in law, medicine, advertising, therapy, business, education, etc. Among the issues considered are privacy and confidentiality, truthfulness and deception, individual responsibility, social justice, "professionalism," and generally, the dilemmas created by conflicts between professional or role morality and personal or ordinary morality. Mr. Overvold/Offered periodically

141 HISTORY OF ANCIENT GREEK PHILOSOPHY/LECTURE, DISCUSSION

Examines the origins of Western thought in early Greek philosophy. Readings include the

fragments of the Pre-Socratic philosophers; the Apology, Phaedo, Gorgias, and Republic of Plato; and selections from Aristotle.

Mr. Pakaluk, Mr. Hendricks/Offered every year

142 HISTORY OF MEDIEVAL PHILOSOPHY/LECTURE, DISCUSSION

Surveys Christian, Jewish and Islamic medieval philosophy with special attention to some of the philosophical texts that were pivotal to the later development of Western philosophy and culture. These include Augustine's Confessions, Boethius' Consolation of Philosophy and Aquinas' Summa Contra Gentiles. Mr. Pakaluk/Offered periodically

143 HISTORY OF MODERN EUROPEAN PHILOSOPHY/LECTURE, DISCUSSION

The two great movements in modern Western thought—Continental Rationalism and British Empiricism—are examined from their common origin in Descartes, through their later articulations by Hobbes, Locke, Berkeley, Leibniz, and Hume, to their eventual transformation by Immanuel Kant. Emphasis is on the interaction of philosophy and science and on the powerful influence exerted by the modern European thinkers upon contemporary thought. Mr. Derr/Offered every year

145 HISTORY OF CONTEMPORARY PHILOSOPHY/LECTURE, DISCUSSION

Surveys the major trends in recent Anglo-American and Continental philosophy: pragmatism, logical positivism, ordinary language philosophy, hermeneutics, and phenomenology. Each alternative is considered as a coherent perspective on experience, with special attention given to its style and methodology. Prerequisite: Philosophy 143 or permission of the instructor. Mr. Overvold/Offered every year

148 HISTORY OF AMERICAN PHILOSOPHY/LECTURE, DISCUSSION

Concentrates on the founders of the first indigenous American philosophical movement, pragmatism—Peirce, James, and Dewey—and explores their influence on later pragmatists—Lewis, Quine, and Rorty. Prerequisite: one course in philosophy. Staff/Offered periodically

150 PHILOSOPHY OF RELIGION/LECTURE, DISCUSSION

Studies religion as a form of world view and a perennial dimension of human experience. Prerequisite: one course in philosophy. Mr. Wright/Offered every year

154 RECENT EUROPEAN PHILOSOPHY/LECTURE, DISCUSSION

Introduces five contemporary European philosophical movements: hermeneutics, deconstructionism, critical theory, structuralism and post-structuralism. Prerequisite: two courses in philosophy or permission of instructor. Mr. Overvold/Offered periodically

160 INTERMEDIATE LOGIC/LECTURE, DISCUSSION

An examination of one of the following: extensions of first-order logic (modal logic, deontic logic, tense logic); metalogic; axiomatics; philosophical problems that arise in connection with formal logic. Mr. Pakaluk/Offered periodically

169 AESTHETICS/LECTURE, DISCUSSION

Why did Plato condemn poets and their work? Can art be neatly defined? Is art "imitation," "emotion," "relations of forms" or is it indefinable? Are there standards of beauty? Among the theories we consider are those of Aristotle, Tolstoy, Collingwood, Danto, Dickie, and Kant. Prerequisite: one course in philosophy. Mr. Hendricks/Offered periodically

170 PHILOSOPHY OF PSYCHOLOGY/LECTURE, DISCUSSION

A philosophical consideration of central concepts and major theories in psychology. Mr. Hendrick/Offered periodically

171 PHILOSOPHY OF EDUCATION/LECTURE, DISCUSSION

An examination of our educational institutions, the value of education, and various theories of education. Focus on such questions as: What kinds of educational institutions are possible? Which ones are best? What does it mean to be "educated"? What is the value of being educated? We will approach these questions through the works of Marx, Plato, Rousseau and others. In addition, we consider

the application of research in psychology and social psychology. Mr. Hendricks/Offered every year

201 SURSEMINAR: RESEARCH AND WRITING IN PHILOSOPHY/SEMINAR

Prerequisite: permission. Staff/Variable credit

202 SURSEMINAR: PHILOSOPHICAL JOURNALS/SEMINAR

Prerequisite: permission. Staff/Variable credit

203 SURSEMINAR: TEACHING PHILOSOPHY/SEMINAR

Registration is limited to students working as discussion group leaders in Philosophy 102, 105, 110, 130, 131 or 132. Mr. Derr, Ms. DeCew, Mr. Pakaluk, Mr. Wright/Offered every semester

210 MODERNISM IN PHILOSOPHY, LITERATURE, AND THE ARTS/LECTURE, DISCUSSION

Between 1890 and 1930, the forms of inquiry and artistic expression in Western culture went through radical, foundational transformation. Using representative texts from the humanities and the arts, this course examines the Modernist transformation in its historical, cultural, and thematic context, using a multidisciplinary perspective to integrate topics in related areas of inquiry and expression. Prerequisite: two courses in philosophy plus courses in related areas. Mr. Overvold/Offered periodically

211 COGNITIVE SCIENCE/LECTURE, DISCUSSION

Focuses on the assumption that the mind is a machine that can be studied scientifically. This involves an examination of the twin ideas that the mind is a computer and that an artificial computer could have a mind. Also, we examine various proposals for how the mind is structured - specifically, the "digital computational" approach and connectionist (PDP) architectures. Our examination attends to research in artificial intelligence, cognitive psychology, neuroscience, and philosophy. Mr. Hendricks/Offered periodically

212 PHILOSOPHY AND THE HUMAN SCIENCES/LECTURE, DISCUSSION

Using texts from both the humanities and the social sciences, the course examines central philosophical themes in the human sciences—

rationality; action, choice, and character; human nature; the other; self and society; explanation and human action—in their historical, cultural, and thematic context, integrating topics in related areas of inquiry and expression. Prerequisite: two courses in philosophy plus courses in related areas. Mr. Overvold/Offered periodically

213 THE IDEAL OF THE EDUCATED PERSON/SEMINAR

This course presents the models of humanity which have been dominant in Western culture. It encourages us to understand, reflect upon, and discuss the competing ideals which influence the formation of educational goals, determine the purpose of public policy, and shape our reflections on self-understanding. Mr. Overvold, Mr. Hendricks/Offered periodically

215 KANT AND THE 19TH CENTURY/LECTURE, DISCUSSION

Examines the work of Kant and selected later philosophers (Fichte, Hegel, Schopenhauer, Nietzsche, Marx, Engels, and Comte) with emphasis on their influence on contemporary thought. Prerequisite: two courses in philosophy, including Philosophy 143. Mr. Wright/Offered every other year

219 FEMINIST THEORY/LECTURE, DISCUSSION

Investigates selected topics in recent feminist philosophical literature. Topics and authors vary each year. Attention is given to the many different perspectives included in contemporary feminist theory. Prerequisite: two courses in philosophy or permission of the instructor. Staff/Offered periodically

220 THEORIES OF ETHICS/LECTURE, DISCUSSION

Examines the principal ethical theories from the history of Western philosophy, including such philosophers as Plato, Aristotle, Epicurus, Aquinas, Hobbes, Hume, Kant, Mill, Ross, and Rawls. Topics include: What is "the Good"? Are there fundamental standards of right conduct? Are moral judgments objective? Why should we be moral? Prerequisite: two courses in philosophy. Ms. DeCew/Offered every year

221 SOCIAL AND POLITICAL PHILOSOPHY/LECTURE, DISCUSSION

Surveys the leading philosophical accounts of social and political institutions. Property, civil and natural rights, freedom and obligations, and the legitimation of political authority are treated in detail. Readings include both classical and contemporary sources. Prerequisite: two courses in philosophy. Ms. DeCew/Offered every other year

228 CONTEMPORARY MORAL THEORY/LECTURE, DISCUSSION

Surveys recent work in moral theory (including both metaethical and normative issues) by leading Anglo-American philosophers. Prerequisite: two courses in philosophy. Ms. DeCew, Mr. Pakaluk/Offered periodically

232 CASE STUDIES IN ENVIRONMENTAL ETHICS/SEMINAR

234 METAPHYSICS/LECTURE, DISCUSSION

An advanced study of fundamental problems in metaphysics: universals, substance, the mind/body relation, category theory, identity and individuation, free will, and the nature of space and time. Prerequisite: two courses in philosophy. Mr. Pakaluk, Mr. Wright/Offered every other year

235 SELF AND NATURE/LECTURE, DISCUSSION

Considers various conceptions of the self in relation to nature developed by classical and contemporary thinkers, with emphasis on the interconnectedness of these terms. Prerequisite: two courses in philosophy. Mr. Wright/Offered every other year

240 EPISTEMOLOGY/LECTURE, DISCUSSION

Studies the nature, concept, and sources of knowledge, with special attention to the interrelationships among belief, knowledge, evidence, proof, truth, and the problem of relativism, skepticism, and foundationalism. Prerequisite: two courses in philosophy. Mr. Overvold, Mr. Hendricks/Offered every year

241 PHILOSOPHY OF SCIENCE/LECTURE, DISCUSSION

Examines such questions as: What is a scientific explanation? Can induction be justified?

What could justify the claim that one theory is better than another? Are there such things as objective "facts"? Do scientific theories disclose the ultimate constituents of the universe?

What is the difference between science and pseudo-science? Prerequisite: four courses in natural sciences or two courses in philosophy. Mr. Derr/Offered every other year

242 PHILOSOPHY OF LANGUAGE/LECTURE, DISCUSSION

A philosophical examination of language. Explores general questions such as: What is the relationship between language and the world? And, What is the relationship between language and thought? Focuses on the nature of reference, meaning, names, conceptual schemes, and analyticity. We will read works by Frege, Russell, Grice, Quine, Kripke and Kaplan. Mr. Hendricks/Offered periodically

250 PLATO/SEMINAR

An advanced study of the philosophical thought of Plato. The seminar involves careful reading and discussion of one of the major dialogues, such as the Parmenides, Sophist, or Theaetetus. Prerequisite: Philosophy 141. Mr. Pakaluk/Offered every other year

251 ARISTOTLE/SEMINAR

An advanced study of the philosophical thought of Aristotle. The seminar involves careful reading and discussion of one of the major works, such as the De Anima, Physics, Metaphysics, and Nicomachean Ethics. Prerequisite: Philosophy 141. Mr. Pakaluk/Offered every other year

256 KANT/SEMINAR

A study of Kant's "Critique of Pure Reason"—regarded by many as the most important philosophical text of the last several hundred years. Prerequisite: two courses in philosophy, including 143. Mr. Wright/Offered periodically

257 HEGEL/SEMINAR

Hegel's "The Phenomenology Mind" and selections from his other works are covered. Prerequisite: two courses in philosophy, including 143. Mr. Wright/Offered periodically

258 THE ORIGINS OF ANALYTIC PHILOSOPHY/SEMINAR

Examines the development of analytic philosophy through an intensive study of its three founding figures: Gottlob Frege, Bertrand Russell, and Ludwig Wittgenstein. Readings include Frege's *Foundations of Arithmetic*, Russell's *Mysticism and Logic*, and Wittgenstein's *Tractatus Logico-Philosophicus*. Prerequisite: two courses in philosophy, including 110 or 160. Mr. Pakaluk/Offered periodically

260 KIERKEGAARD AND NIETZSCHE/SEMINAR

Studies Kierkegaard and Nietzsche as seminal figures in 19th-century intellectual life and as sources of later 20th- and 21st-century philosophical developments. Particular attention is given to their views of human existence and of truth. Prerequisite: two courses in philosophy. Mr. Overvold/Offered periodically

263 PHILOSOPHY OF MIND/SEMINAR

A critical examination of the nature and concept of mind. We consider various issues from among the following: What is the relationship between the mind and the brain? What is the nature of consciousness? How do mental states represent the world? What is the structure of the Mind? And, Is the mind a machine? Mr. Hendricks/Offered periodically

265 IDEALISM/SEMINAR

Detailed and advanced study of the major idealistic philosophers. Course topics and texts will vary. Mr. Wright/Offered every other year

266 CRITICAL RATIONALISM/SEMINAR

Focuses on the theories of knowledge, rationality, and science advanced by such contemporary thinkers as Kuhn, Popper, Feyerabend, Laudan, Lakatos, and Zahar. Prerequisite: two courses in philosophy, including 241, or permission. Mr. Derr/Offered periodically

270 PHILOSOPHY OF LAW/SEMINAR

Examines fundamental questions in philosophy of law, such as: What is the source and purpose of law? What is the nature of judicial reasoning, and is it subjective or governed by some set of principles? How do alternative theories of law explain rights, duties, liability, responsi-

bility, and so forth? What is the relationship between liberty, privacy, and justice?

Prerequisite: two courses in philosophy.
Ms. DeCew/Offered every year

272 ADVANCED ISSUES IN MEDICAL ETHICS/SEMINAR

A rigorous investigation of two or three current controversies related to medicine, health policy, and ethics. Readings include original materials from legal, medical, and philosophical literature. Topics have included: surrogate motherhood, AIDS, xenogestation, and assisted suicide. Prerequisite: Phil 130 and permission of the instructor. Mr. Derr/Offered periodically

275 PHENOMENOLOGY AND HERMENEUTICS/SEMINAR

Traces the development of two major 20th-century movements in continental philosophy. Edmund Husserl and Maurice Merleau-Ponty are focussed on in *Phenomenology*; Hans Georg Gadamer in *Hermeneutics*. In both, collateral reading will present the historical context and development of each movement. Prerequisite: at least three courses in philosophy. Mr. Overvold/Offered periodically

276 HEIDEGGER AND EARLY 20TH-CENTURY PHILOSOPHY/SEMINAR

Concentrates on developments in 19th- and 20th-Century Continental philosophy, which influenced the main text of this seminar, Heidegger's *Being and Time*. Attention also will be given to the broader cultural context and to parallel changes in American and British philosophy during the early 20th century. Prerequisite: at least three courses in philosophy. Mr. Overvold/Offered periodically

287 PHILOSOPHY OF THE SOCIAL SCIENCES/SEMINAR

An examination of psychology and economics with a view to their relation to problems in philosophy, especially moral philosophy. We consider such topics as the nature of intentionality; teleology; value; and the instrumental conception of rationality. Prerequisite: one course in philosophy and one course in psychology or economics. Mr. Pakaluk/Offered periodically

295 SENIOR THESIS/INDIVIDUAL PROJECTS

The prerequisites, which should be completed by the end of the student's junior year, are: (1) at least six courses in philosophy; and (2) submission and approval of a thesis proposal. The thesis proposal must describe the nature and scope of the proposed project, provide a bibliography of the principal sources the student expects to use, include a schedule for submission of first and final drafts to the advisor and the committee, and be signed by the student's thesis advisor. Upon completion of the thesis, the department faculty schedules an oral defense for the student. For regulations on "Honors," see earlier entry. Offered for one or two credits over one or two semesters. Ms. DeCew, Mr. Derr, Mr. Overvold, Mr. Pakaluk

299 SEC. 1 DIRECTED READINGS/INDIVIDUAL PROJECTS

299 SEC. 2 DIRECTED RESEARCH/INDIVIDUAL PROJECTS

See description and prerequisites under Major Requirements above.

299 SEC. 5 RESEARCH APPRENTICESHIP/INDIVIDUAL PROJECTS

A research apprentice participates in the current professional research of her or his faculty sponsor. Students accepted as apprentices need initiative, perseverance, and superior research and writing skills. Prerequisite: at least four courses in philosophy, permission of the instructor, and approval of the department. Ms. DeCew, Mr. Derr, Mr. Overvold, Mr. Pakaluk, Mr. Wright/Offered every semester

299 SEC. 7 ADVANCED TOPICS IN PHILOSOPHY/INDIVIDUAL PROJECTS

Individual tutorials and supervised research on philosophical topics selected by the student and faculty sponsor. Prerequisite: at least four courses in philosophy and permission of instructor. Ms. DeCew, Mr. Derr, Mr. Overvold, Mr. Pakaluk, Ms. Thomas, Mr. Wright/Offered every semester

PHYSICS

Department Faculty

- Christopher P. Landee, Ph.D.,** *chair:*
experimental condensed matter physics, magneto-chemistry
Charles Agosta, Ph.D.: *experimental condensed matter physics; director of 3/2 engineering program*
S. Leslie Blatt, Ph.D.: *physics education, experimental nuclear physics*
John Davies, Ph.D.: *theoretical plasma physics*
Harvey Gould, Ph.D.: *theoretical condensed matter physics, computer simulation*
Arshad Kudrolli, Ph.D.: *experimental condensed matter physics; granular systems; biological physics*

Adjunct Faculty

- Daeg S. Brenner, Ph.D.,** *nuclear chemistry*
Rafael Bruschweiler, Ph.D., *biophysical chemistry; protein NMR*
Robert L. Goble, Ph.D., *Environmental Science and Policy: technology assessment, atmospheric physics and turbulence*
Alan A. Jones, Ph.D., *polymer chemistry*

Affiliate Faculty

- George Phillies, Ph.D.,** *Worcester Polytechnic Institute: condensed matter physics*

Emeritus

- Roy S. Andersen, Ph.D.:** *history and philosophy of science*
Christoph Hohenemser, Ph.D.: *technology assessment; energy and environmental issues*
Roger P. Kohin, Ph.D.: *experimental condensed matter physics*

Postdoctorate Research Associate

- Carmen Gagne, Ph.D.:** *theoretical condensed matter physics, cosmology*

Laboratory Specialist

- Louis Colonna-Romano, M.S., M.B.A.:** *condensed matter physics, computational physics*

Undergraduate Program

Physics is the most fundamental of the sciences and is an important part of a liberal arts education. Introductory courses are designed for students in all majors and provide a background in physical principles, the observation of natural processes, the logic and nature of science, and the diverse applications of physics. The introductory courses are:

1. **Scientific Perspective Courses.** Physics 20, 30, 140, Astronomy 001, and Astronomy 002 have no prerequisites and satisfy the scientific perspective requirement of the Program of Liberal Studies. Physics 110 and Physics 120 can be taken in satisfaction of either the scientific perspective requirement or the formal analysis requirement, but not both. Physics 111, 121, 127, 130, and 131, which also satisfy the scientific perspective requirement, are primarily for science majors.
2. **Introductory Sequences.** Prospective science majors are urged to begin their study of physics during their first or second years. The department offers two sequences of introductory courses. Physics 110/111 is a two-semester, non-calculus-based survey of physics appropriate for the majority of science majors, including environmental science and policy majors and premedical/pre-dental students. Physics 120/121/130 is a three-semester sequence recommended for physics, chemistry, and mathematics majors, and covers mechanics, electricity and magnetism, waves, and optics in more depth than the 110/111 sequence. Because Physics 121 discusses the subject matter more deeply, it is less comprehensive than Physics 111, and should be followed by Physics 130.
3. **Laboratory Courses.** Physics 110, 111, 120, 121, 127, 130, 131, and 219 offer laboratory experience. Physics 110 and 111 fulfill the physics laboratory requirement for premedical/pre-dental students.

Major requirements

A major in physics can be structured to meet the interests of individual students, including graduate study in physics, related sciences, engineering, and careers in environmental studies, management, government, law, medicine, and teaching. During their first year, prospective physics majors are urged to enroll in Physics 120 and 121 and to consult the undergraduate physics advisor about their program of study. Physics major requirements consist of fourteen common core courses and four additional approved courses in physics or related areas. The requirements are flexible and, through consultation with the undergraduate physics advisor, may be modified to satisfy the particular needs and interests of each student. Examples of individual programs include:

General Physics – for students who wish to major in physics as part of liberal arts education, including preparation for careers in teaching or business.

Preprofessional Physics – courses in physics, chemistry, and mathematics to prepare students for graduate study in physics or research in industry.

Biological Physics – includes chemistry and biology courses that can be used to prepare for medical or dental schools or for careers in the biomedical professions.

Materials Science – advanced courses in physics and chemistry designed to prepare students for graduate study in the interdisciplinary area of materials science.

Computational Physics – advanced courses in physics, computer science, and mathematics designed to prepare students for graduate study in the rapidly growing area of computational science.

Technology Assessment – interdisciplinary courses to enable students to make physical, economic, and value assessments of technological systems.

Students interested in using physics as the basis for an engineering career should inquire about the **3/2 Engineering Program** offering students a five-year option that combines a B.A. from Clark and a B.S. in engineering from Columbia University, Washington University (St. Louis), or Worcester Polytechnic Institute.

Courses in the core curriculum include:		
1. Introductory Physics:		
Physics 120 and Physics 121 (or 110/111)	2	
2. Intermediate level Physics:		
Physics 130 and 131	2	
3. Calculus:		
Mathematics 124, 125, 130, and 131	4	
4. Laboratory-based courses:		
Physics 127 or 219	1	
5. Upper-level courses:		
Physics 150, 160, 161, and 171	4	
6. Senior project:		
Physics 299	1	
Total in Core Curriculum	14	
Additional approved electives	4	
Total In Major Program	18	

Students with strong backgrounds in physics and mathematics may replace lower-level required courses with appropriate advanced courses with advisor approval. Advanced placement credits may count toward major requirements. Advanced undergraduates may take graduate level courses. Majors must meet with the undergraduate physics advisor prior to registration every semester to plan their course of study and to ensure that all requirements for the major are being satisfied. It is possible to complete all requirements for the major within three years, so that it is not essential to begin the study of physics in the first year.

Information about career opportunities and further information about courses and major requirements can be obtained from the undergraduate physics advisor and other physics faculty members.

The Capstone Experience

An independent research project is the appropriate capstone experience for most physics majors. Students are encouraged to “do physics” at the earliest opportunity. Majors must take a capstone course satisfied by one semester of Physics 299, Directed Study in Physics, or an approved course of comparable scope. Near the end of the junior year (or earlier) a physics major should choose a topic for his or her senior project with department faculty. Work is conducted under the guidance of a faculty member, often with the assistance of graduate students. These projects often lead to publication in refereed physics journals. Majors with a special interest in research may continue their research by enrolling in additional semesters of Physics 299.

Honors Program

Students can apply for departmental honors in recognition of meritorious academic achievement and creativity in research. An honors candidate must maintain a minimum overall B-average. All eligible majors are encouraged to participate. Written applications should be submitted to the undergraduate advisor by the end of the junior year. Candidates will conduct a research project under faculty member guidance during the junior and/or senior years. A thesis describing the work must be submitted no later than April 1 of the senior year and be defended orally in a special departmental convocation about two weeks later.

Recommendation for honors in physics is made on the basis of the quality of the thesis and student performance in the defense. Students may gain credit for thesis research by registering for Physics 299.

Minor requirements

The requirements for a minor in physics include six courses consisting of Physics 120/121 (or 110/111), Physics 130, Physics 131, and two additional electives approved by the undergraduate physics advisor. Students receiving credit for a scientific perspective course in physics prior to enrolling in Physics

120 may use it to replace one elective course. Requirements are flexible and the undergraduate physics advisor can replace any of the required core courses for students who are prepared for more advanced training.

Five-year B.A./M.A.

The department offers a M.A. degree in physics to undergraduate physics majors who complete a minimum of four core graduate courses from the following list: Physics 301, 302, 305, 306, 309, and 310 and who submit an acceptable thesis based on original research. It also is possible to combine the undergraduate physics major with five-year M.A. programs in education and in environmental science and policy. Details are available from the department office.

Graduate Program

The department offers the master of arts and doctor of philosophy degrees in physics. Research is concentrated in experimental and theoretical studies of condensed matter, including magnetic and optical properties of solids, magnetic critical phenomena, superconductivity, granular matter, quantum chaos, supercooled liquids and nucleation, and computer simulations. Other research areas include theoretical plasma physics, interdisciplinary studies of risk assessment and energy technology, nuclear physics, and biomolecules.

The academic requirements are flexible, with emphasis on early student participation in research and informal student evaluation. A distinctive part of each student's course work is a research apprenticeship, Physics 303, which introduces students to different research groups beginning in the first year of graduate studies.

M.A. degree students must satisfy the general University residence and course requirements, pass with a grade of B- or better four of the core graduate courses (Physics 301, 302, 305, 306, 309, and 310) and one semester of Physics 303, and pass two oral examinations in the subject matter of the core graduate courses. In contrast to M.A. physics programs at many

other universities, M.A. candidates also must complete a thesis based on original research.

Ph.D. degree students must fulfill residence and course requirements, pass the core graduate courses (Physics 301, 302, 305, 306, 309, and 310) with a grade of B or higher, and complete three semesters of Physics 303. The department does not rely on a formal written qualifying examination to evaluate student readiness for the Ph.D. Instead, students must pass four oral examinations that stress qualitative as well as quantitative aspects of the subject matter of the core graduate courses. Students are required to pass an additional graduate course (approved by the graduate student advisor) in a subject that is outside the area of their dissertation concentration. The course may be in physics, the other sciences, mathematics, computer science, or in another appropriate field. Ph.D. candidates also complete a dissertation based on original research. Students entering with advanced standing and transferable credit are encouraged to demonstrate proficiency in the core graduate courses through oral examinations.

Graduate students in both the M.A. and Ph.D. programs are required to gain supervised teaching experience either as teaching assistants or teaching fellows in the department, or elsewhere if approved by the department.

More information about the requirements for the Ph.D. and M.A. degrees in physics is available from the Graduate Student Handbook. Copies are available upon request from the graduate student advisor.

Further information on the research interests of the faculty and research opportunities for graduate students can be found at the department's Web site, <http://physics.clarku.edu>.

Application forms for admission and financial aid may be requested from the chair of the department. During the academic year, financial support is available in the form of tuition remissions, teaching assistantships, and research assistantships. The department considers the financial support of its graduate students an important responsibility.

Astronomy Courses

Recommended for both nonscience and science majors as general education and to satisfy the scientific perspective requirement of the Program in Liberal Studies. Astronomy is not a formal program or major; students interested in a career in astronomy should major in physics.

001 EXPLORING THE UNIVERSE/ LECTURE/OBSERVATORY

Concepts and methods of science for non-science majors. Devoted to the planets, sun, stars, their life cycles, and the galaxies. Involves physics, chemistry, biology, and geology. Explores theories of the composition and origin of the solar system, the universe, and life. Students observe celestial objects including the moon, sun, planets, meteors, stars, nebulae, and galaxies using telescopes in the University observatory. Satisfies the scientific perspective requirement. Mr. Blatt, Mr. Davies/Offered every fall

002 THE PLANETS AND SPACE EXPLORATION/ LECTURE/OBSERVATORY

Can be taken as a first course in astronomy or as a second course after Astronomy 001. Emphasizes the solar system and past and future projects for its exploration. Topics include the sun, comets and asteroids, planetary and satellite surfaces, and planetary interiors and atmospheres. The principles of rocket flight and the motion of objects in the solar system are treated qualitatively and with simple algebra. Satisfies the scientific perspective requirement. Mr. Blatt, Mr. Davies/Offered every spring

Physics Courses

20 DISCOVERING PHYSICS/LECTURE, LABORATORY

Emphasizes hands-on experience and the learning of science using approaches similar to ways found effective in teaching children, and paralleling the ways scientists gain new knowledge. Designed for students interested in education, but open to all undergraduates; no special expertise in mathematics and science is assumed. Topics include wave and particle phenomena with an emphasis on the proper-

ties of light. Two laboratories and group discussions per week. Cross-listed with Education 254. Satisfies the scientific perspective requirement. Mr. Blatt/Offered every year

30 THE NATURE OF LIGHT/LECTURE, LABORATORY

Follows the historical and philosophical development of our understanding of the nature of light leading to current ideas of space, time, mass and energy. Lecture demonstrations, modern versions of classic experiments and readings from original sources will be employed. Topics, treated qualitatively and with simple algebra, include particle theories of light, electromagnetic waves, emission of light from atoms, special relativity and the famous equation " $E = mc^2$ " and its implications. One laboratory every other week. Satisfies the scientific perspective requirement. Mr. Colonna-Romano/Offered every fall

110 INTRODUCTORY PHYSICS – PART I/LECTURE, DISCUSSION, LABORATORY

Introductory level, concept-oriented survey course for science majors and other students. Stresses the simplicity and self-consistency of physical models in explaining a variety of physical phenomena. Topics include Newtonian mechanics and an introduction to the thermal properties of matter. Calculus is not required, but elements of algebra and trigonometry are reviewed and utilized. Physics 110, with Physics 111, fulfills the usual entrance requirements for medical and dental schools. Three lectures and one discussion section per week as well as one laboratory every other week. Satisfies the scientific perspective requirement or the formal analysis requirement. Mr. Kudrolli, Mr. Landee/Offered every fall

111 INTRODUCTORY PHYSICS – PART II/LECTURE, DISCUSSION, LABORATORY

A continuation of Physics 110. Topics include wave motion, electricity, magnetism, and optics. Students who do not intend to take a second year of physics should enroll in this course instead of Physics 121. Three lectures and one discussion session per week, as well as one laboratory every other week. The laboratory is designed to fulfill the usual entrance

requirements for medical and dental schools. This course satisfies the scientific perspective requirement. Mr. Kudrolli, Mr. Landee/ Offered every spring

120 INTRODUCTORY PHYSICS – PART I/LECTURE, DISCUSSION, LABORATORY

Problem-oriented course intended for science majors; coverage is more in-depth than Physics 110. Topics include Newtonian mechanics and wave motion. Course should be taken with Math 124 so the elements of calculus and its applications to physics can be treated at the same time. Three lectures and one discussion section per week, as well as one laboratory every other week. Corequisite: Mathematics 120 or 124. Satisfies the scientific perspective requirement or the formal analysis requirement. Mr. Agosta, Mr. Kudrolli/Offered every fall

121 INTRODUCTORY PHYSICS – PART II/LECTURE, DISCUSSION, LABORATORY

Continuation of Physics 120 offering a more in-depth introduction to physics than Physics 111. The topics of electricity, magnetism, light and optics are discussed. Recommended second semester course for physics, mathematics, and other science majors who intend to continue with Physics 130. Three lectures and one discussion session per week as well as one laboratory every other week. Credit is not given for both Physics 111 and 121. Satisfies the scientific perspective requirement. Corequisite: Mathematics 121 or 125. Mr. Agosta, Mr. Kudrolli/Offered every spring

127 COMPUTER SIMULATION LABORATORY/ DISCUSSION, LABORATORY

Introduces methods of computer simulation and its diverse applications. The course is project-oriented, with students proceeding at their own pace depending on their background and interests. Projects include planetary motion, chaotic systems, fractal phenomena, random systems, and thermal systems. Methods include the numerical solution of differential equations and Monte Carlo techniques. The course emphasizes object-oriented programming, and is recommended for prospective science majors

as an introduction to programming rather than Computer Science 101. Two laboratory sections and two discussion periods per week. Satisfies the scientific perspective requirement. Prerequisites: Physics 120, Mathematics 120 or 124, or instructor permission. No background in computer programming is required. Mr. Gould/Offered every spring

130 OSCILLATIONS, WAVES, AND OPTICS/SEMINAR, LABORATORY

The third of a four-semester introductory survey of physics. The seminar meets for three hours per week plus an afternoon laboratory. Oscillations and harmonic motion, wave phenomena such as interference, diffraction, and standing waves, plus ray and wave optics are some of the topics covered. Key experiments include studies of mechanical, acoustic, and optical waves, wave resonance in oscillating systems, construction of optical instruments, and the measurement of the speed of light. Prepares the student for the study of quantum waves in Physics 130. Satisfies the scientific perspective requirement. Prerequisites: Physics 111 or 121; corequisite: Mathematics 130. Mr. Kudrolli, Mr. Landee/Offered every fall

131 QUANTUM PHYSICS/SEMINAR, LABORATORY

The last in a four-semester survey of physics sequence; intended to follow Physics 130. After an introduction to relativity theory, the course emphasizes the experimental basis of atomic and nuclear structure leading to the development of wave mechanics. The laboratory uses modern research instrumentation to address contributions by Einstein, Rutherford, Compton, Moseley, Chadwick, and others. Satisfies the scientific perspective requirement. Prerequisite: Physics 130; corequisite Mathematics 131. Mr. Blatt, Mr. Colonna-Romano/Offered every spring

140 ENERGY AND THE ENVIRONMENT/LECTURE, DISCUSSION

Discusses the central role of energy production, distribution, and consumption in human activities, and the range of social, economic, and political impacts that follow. Experiments and data analysis will be conducted using the

University campus physical plant as an extended laboratory. This course is cross listed with ES144. Satisfies the scientific perspective requirement. Mr. Agosta/Offered every year

150 STATISTICAL AND THERMAL PHYSICS/LECTURE, DISCUSSION

Introduces the concepts of thermodynamics and statistical mechanics with the goal of understanding the behavior of macroscopic systems on the basis of microscopic theory. Topics include probability, entropy and the second law of thermodynamics, the Boltzmann probability distribution, heating and work, and the first and second law efficiencies of simple engines. Prerequisite: Physics 130; corequisite: Mathematics 131. Mr. Gould, Ms. Gagne/Offered every fall

160 CLASSICAL MECHANICS/LECTURE, DISCUSSION

Physics 160 and 161 constitute an introduction to the concepts of classical physics at the intermediate level. Topics include particle and rigid body dynamics in inertial and noninertial reference frames. The necessary mathematical methods are introduced and applied. Prerequisites: Mathematics 131 and Physics 111 or 121. Mr. Davies/Offered every fall

161 ELECTRICITY AND MAGNETISM/LECTURE, DISCUSSION

Continuation of Physics 160. Topics include electro- and magnetostatics and electrodynamics through Maxwell's equations and relativity. Develops useful mathematical methods. Prerequisite: Physics 160. Mr. Landee, Mr. Kudrolli/Offered every spring

171 ATOMIC AND NUCLEAR PHYSICS/LECTURE, DISCUSSION

Intermediate level course providing an introduction to quantum mechanics and its applications to atoms, nuclei, molecules, and solids. Prerequisites: Physics 131 and Mathematics 131. Mr. Agosta, Ms. Gagne/Offered every year

201 CLASSICAL DYNAMICS/LECTURE, DISCUSSION

Designed to prepare students for graduate work in physics. Topics include Hamilton's principle, classical scattering theory, rigid body motion,

canonical transformations, Hamilton-Jacobi theory, and mathematical methods of physics. Lectures are the same as Physics 301, but the assignments and evaluation are separate. Prerequisite: Physics 160 and 161. Mr. Davies/Offered every fall

202 ELECTRODYNAMICS/LECTURE, DISCUSSION

Designed to prepare students for graduate work in physics. Topics include boundary value problems in electrostatics and magnetostatics, electromagnetic field equations and special relativity, electromagnetic waves, radiation theory, multipole fields, and mathematical methods of physics. Lectures are the same as Physics 302, but the assignments and evaluation are separate. Prerequisite: Physics 161. Mr. Davies/Offered every spring

205 QUANTUM MECHANICS – PART I/LECTURE

Physics 205 and 206 constitute a comprehensive introduction to the concepts of quantum mechanics and their application in physics and chemistry. Sequence prepares students for graduate work. Lectures are the same as in Physics 305, but the assignments and evaluation are separate. Prerequisites: Physics 171 and Mathematics 131. Mr. Davies/Offered every fall

206 QUANTUM MECHANICS – PART II/LECTURE

Physics 206 is a continuation of Physics 205. Prerequisite: Physics 205. Mr. Davies/Offered every spring

209 STATISTICAL MECHANICS/LECTURE, DISCUSSION

Designed to prepare students for graduate work in physics. The lectures are the same as in Physics 309, but the assignments and evaluation are separate. Prerequisites: Physics 150 and 171. Mr. Gould, Mr. Phillies/Offered every fall

219 ELECTRONICS LABORATORY/LECTURE, LABORATORY

Examines principles of modern electrical measurement and control. Introduces DC and AC circuit theory and use of test instruments such as multimeters and the oscilloscope. Emphasizes electronic circuit design, operational amplifiers, and digital circuits. Two lectures

and one laboratory each week. Suitable for intermediate level undergraduates and graduate students in the sciences. Mr. Agosta/Offered every other fall

290 SENIOR SEMINAR/SEMINAR

This capstone covers a selection of topics of current interest in physics. Offered for variable credit. Staff/Offered periodically

299 DIRECTED STUDIES IN PHYSICS

Independent student work in physics, with the guidance of a faculty advisor. With permission of the instructor, students may enroll for senior capstone or honors projects, directed readings in areas not covered in regular courses, or independent research in theoretical, experimental, or applied physics. Offered for variable credit. Physics 299 may be taken more than once. Staff/Offered every semester.

301 CLASSICAL DYNAMICS

Graduate level course in classical mechanics. Topics are similar to Physics 201, but are treated in greater depth. Mr. Davies/Offered every fall

302 CLASSICAL ELECTRODYNAMICS

Graduate level course in classical electromagnetism. Topics are similar to Physics 202, but are treated in greater depth. Mr. Davies/Offered every spring

303 RESEARCH APPRENTICESHIP

Research apprentices participate actively in an experimental or theoretical research group. Ph.D. students enroll in the course for three semesters with a minimum of one semester in a theoretical group and one semester in an experimental group. M.A. students take a minimum of one semester. Staff/Offered every semester

305 QUANTUM MECHANICS – PART I/LECTURE, DISCUSSION

Physics 305 and 306 offer a comprehensive introduction to quantum mechanics and its application in physics and chemistry. Topics include the foundations of quantum mechanics, symmetries and angular momentum, particle in a central potential, electron spin, and perturbation theory. Mr. Davies/Offered every fall

306 QUANTUM MECHANICS – PART II/LECTURE, DISCUSSION

Physics 306 is a continuation of Physics 305. Topics include scattering theory, interaction of radiation with matter, second quantization, applications to simple atoms and molecules, and an introduction to many-body theory. Mr. Davies/Offered every spring

309 STATISTICAL MECHANICS/LECTURE, DISCUSSION

Examines statistical mechanics with applications to physical systems. Topics include ensemble theory, the statistical basis of thermodynamics, quantum statistics, the virial expansion of a classical gas, ideal Bose and Fermi systems, the renormalization group, and fluctuations. Mr. Gould/Offered every fall

310 SOLID STATE PHYSICS/LECTURE, DISCUSSION

Examines experimental properties and the quantum theory of solids. Topics include crystal and reciprocal lattice structures, the free electron theory of metals, electronic band structure and the Fermi surface, lattice vibrations, and the elementary excitations of solids. Prerequisite: Physics 305 or permission of instructor. Mr. Landee/Offered every spring

319 ADVANCED ELECTRONICS LABORATORY/LECTURE, LABORATORY

Similar to Physics 219, but more advanced. Topics are treated in greater depth. Suitable for graduate students in the sciences. Mr. Agosta/Offered every fall

320 ADVANCED SEMINAR IN PHYSICS

Provides for special coverage of topics in physics of current research interest. Offered for variable credit. Staff/Offered periodically

325 RESEARCH SEMINAR

Student participation seminar on current research problems. Offered for variable credit. Staff/Offered periodically

327 ADVANCED COMPUTER SIMULATION LABORATORY

Similar to Physics 127 but more advanced. Suitable for graduate students in the sciences or undergraduates who have completed Physics 127. Prerequisite: Physics 127 or instructor permission. Mr. Gould/Offered every spring

390 COLLOQUIUM

Weekly invited lecturers speak on current research topics. Required for all graduate students and recommended for undergraduates involved in research. Not offered for credit. Staff/Offered every semester

397 RESEARCH

Thesis and dissertation preparation. Offered for variable credit. Staff/Offered every semester

PSYCHOLOGY

Program Faculty

Jaen Valsiner, Ph.D., chair: cultural psychology, history of ideas

Michael E. Addis, Ph.D.: psychology of masculinity, help-seeking behavior, lay theories of treatment and psychopathology

Michael Bamberg, Ph.D.: narratives, discourse analysis, gender & identity, emotion talk, language acquisition

Nancy Budwig, Ph.D.: language development, socialization, discursive psychology

Esteban Cardemil, Ph.D.: minority mental health, prevention and treatment, depression

James V. Cordova, Ph.D.: couples' relationship health and deterioration; couples' therapy research; intimacy, acceptance, depression, and motivating the adoption of relationship healthy practice; the Marriage/Relationship Checkup and Couples Therapy for Depression

Joseph de Rivera, Ph.D.: the structure and function of different emotions, the relationships between emotion and action, the social psychology of non-violent action for peace and justice

Rachel Joffe Falmagne, Ph.D.: thought in societal context, gender, thought and society, critical perspectives on knowledge construction

Wendy S. Grolnick, Ph.D.: motivation and development, self-regulation of emotion and behavior in infancy and early childhood, parent and teacher influences on children's motivation and adjustment, child clinical psychology

James D. Laird, Ph.D., emotional experience, self-perception, attributions to others, structures of person awareness, world hypotheses as personality variables

James P. McHale, Ph.D.: family theory and measurement, community psychology and prevention

Elaine Reese, Ph.D.: autobiographical memory development, narrative, literacy

David A. Stevens, Ph.D.: taste and smell, psychophysics, research methods and analyses

Nicholas S. Thompson, Ph.D.: evolutionary psychology

Penelope Vinden, Ph.D.: children's understanding of mind and its sociocultural context, especially parenting and language

Marianne Wiser, Ph.D.: cognitive development, especially concept acquisition, science teaching and learning, and symbolism

Other Faculty

Robert W. Baker, Ph.D.

Roger Bibace, Ph.D.

Bernard Kaplan, Ph.D.

Seymour Wapner, Ph.D.

Morton Wiener, Ph.D.

Adjunct Faculty

Sharon Griffin, Ph.D.

Linda Kennedy, Ph.D.

Part-time Faculty

Robert A. Ciottonne, Ph.D.

Cathleen Crider, Ph.D.

Jonathan Demick, Ph.D.

Edith F. Kaplan, Ph.D.

Eydie Kasendorf, Ph.D.

Robert J. O'Connell, Ph.D.

Marlene Oscar-Berman, Ph.D.

Lawrence Peterson, Ph.D.

Research Associates

Barbara Dowds, Ph.D.

Frances L. Hiatt School of Psychology

The Frances L. Hiatt School of Psychology, formed in 1987, has a major endowment provided through the generous support of the Hiatt family. The school, which encompasses the Department of Psychology, with the Heinz Werner Institute for Developmental Analysis, and the Department of Education, provides, in

addition to Frances L. Hiatt Graduate Fellowships, opportunities for organizing and attending conferences and support for travel and research activities for the school's faculty and students.

The Heinz Werner Institute for Developmental Analysis

Associated with the department is the Heinz Werner Institute for Developmental Analysis, which has three aims: to integrate various research programs dealing with developmental problems; to attract scholars, teachers, and research workers from disciplines for which developmental problems are pertinent, such as anthropology, biology, and certain areas of medicine; and to train research workers on postdoctoral levels in the comparative-developmental approach to behavior. For more information, write to Dr. Seymour Wapner, chair of the institute's Executive Committee.

Undergraduate Program

The Department provides educational experiences that both contribute to liberal arts education and prepare students for graduate work in psychology or related disciplines. The program emphasizes the role of psychological scholarship in understanding human behavior and experience. The program culminates in small and intensive capstone courses that offer students an opportunity to participate fully in the theoretical and research life of the Department.

Introductory Courses in Psychology

The six introductory courses provide a foundation in the content and method of psychology and should normally be completed by the end of the sophomore year.

The introductory courses include 101 General Psychology, two methods courses, 105 Quantitative Methods and 107 Approaches to Psychological Research, and at least one course from EACH of three broad content areas of psychology. These are:

Basic Processes (BP): Courses in evolutionary psychology, physiological psychology, learning, sensation, and perception and cognition.

Choose from:

- 120 Human Cognition
- 130 Psychology of Learning
- 135 Paradox of Animal Sociality
- 136 Animal Instinct, Animal Mind
- 140 Biology of the Brain
- 142 Sensation and Perception
- 145 Psychophysiology

Development (DEV): Courses in historical, cultural, and human developmental psychology. Choose from:

- 150 Development in Child and Adolescent
- 156 Cultural Psychology
- 158 Self, Discourse, and Construction

Social/Personality (S/P): Courses in social, clinical, personality, and abnormal psychology.

Choose from:

- 170 Social Psychology
- 172 Psychology of Personality
- 173 Introduction to Abnormal Psychology
- 175 Introduction to Clinical Psychology
- 176 Introduction to Peace Studies

Declaring a Psychology Major and Related Field

A student nearing the end of his or her sequence of introductory courses should come to the Department Office to declare a major and be assigned a Psychology advisor. This formality will normally occur by the spring of a student's sophomore year. When declaring a major, a student must also choose a RELATED FIELD. The related field requirement reflects the conviction of the faculty that all academic areas are usefully related to psychology, and that understanding the relation between psychology and another discipline requires knowing that other discipline in considerable depth. A related field is generally a recognized six-course concentration or minor. Alternatively, a student may adopt as a related field any pattern of six courses that his or her psychology advisor has approved as providing depth of knowledge in a discipline related to psychology.

Mid-Level Courses

In addition to the above six introductory courses, majors must take TWO mid-level courses that provide experience with the two fundamental activities of academic psychology, the conduct of psychological investigations and the analysis and interpretation of psychological literatures. Students complete at least ONE EACH of the following types of mid-level courses by the end of the junior year.

First Seminars focus on the attentive analysis of psychological texts, the articulation of opinions concerning psychological issues, and the use of library and reference skills in psychological writing. (Permission to take a capstone seminar as a first seminar will not ordinarily be given and must, in any case, be obtained in writing in advance from the faculty member involved.) Choose ONE from numbers 240-259.

Laboratories focus on doing psychological research including planning, data collection, analysis, interpretation, and presentation. (Choose from numbers 200-214.) The laboratory requirement may be fulfilled by taking a research course.

Research courses are opportunities to participate in faculty and/or graduate student research projects, in all stages of the research process from conceptualization to presentation. The work normally terminates in an Academic Spree Day presentation and/or co-authorship of a scholarly paper or conference presentation. Students desiring to join a research course should make arrangements with a faculty sponsor well in advance. In approaching faculty members to make these arrangements, students should bear in mind that research courses are taken on as an addition to a faculty member's normal teaching load and that space in them is limited. Choose from numbers 215-230. In rare instances, this requirement may be met by research experience done for credit in another department. In such cases, PSYC 101, 105, and 107 must have been completed, and the proposed project approved before course registration and after course completion.

Capstone Courses

Capstone courses provide an opportunity for students to participate more intensively in the analysis of a psychological literature or the pursuit of empirical research in psychology. Thus, the capstone requirement may be fulfilled by taking ONE of two kinds of courses.

Capstone Seminars are open to undergraduates and are taught at or near the graduate level. (Permission to take a second lower-level seminar as a capstone will not ordinarily be given and must, in any case, be obtained in advance in writing from the faculty member involved.) Choose from numbers 260-293.

Capstone Research. Students fulfilling the capstone requirement with a research course should notify the faculty member when they seek permission for the course. Capstone research students should expect to write a substantial research report describing the theory, methods, statistical method, results, and conclusions of the project they conducted.

The Honors Program

Honors work in psychology is available to seniors who have demonstrated high scholastic achievement and the ability to work independently in scholarly situations. Students petition the department faculty for admission to the honors program with the support of a faculty sponsor and a description of a proposed research project. This research provides a basis for a thesis which, upon completion, is presented and defended by the student before an examining committee of faculty. Level of honors is determined by the full department on the basis of recommendations from its examining committees. Students interested in departmental honors in psychology should make arrangements with a faculty sponsor during the second semester of their junior year or earlier, enroll in Psychology 293 for the two semesters of their senior year, and be formally admitted to the program no later than the beginning of their senior year.

Doctoral Program

General Requirements

Only those students who plan to enroll in the Ph.D. program on a full-time basis are admitted for graduate work. The aim of the program is to provide students with a general integrated background covering the various areas of psychology. Specialization in several areas of study is available. Although a small department cannot reflect the entire spectrum of perspectives toward the study of psychology, a considerable number of theoretical orientations are demonstrated by the faculty. Important emphasis is placed on theoretically grounded inquiry and conceptually and methodologically rigorous research. In all programs, including the clinical program, there is a deep concern with conceptual analysis and theoretically grounded and directed inquiry. Unique is the diversity of methods of investigation used by faculty and graduate students in their work and the range of problems taken to fall within the purview of psychologists. Students are acquainted not only with traditional experimental and naturalistic methods, but also with phenomenological, structural, hermeneutic, and other methodologies. Participation in research is strongly encouraged, the nature being determined by interests a student shares with faculty members. Students are expected to contribute significantly to problem formulation, conceptualization, methodology, analysis, and write-up of research work.

Advisors

A faculty advisor will be assigned to help each student plan a curriculum to best meet individual needs and goals. The advisor may change or waive any of the requirements of specific training programs with department approval, but ordinarily the advisor's function is to assist students in selecting a curriculum from within the normal requirements. In addition to course selection, the advisor will work with the student to develop a portfolio of scholarly and professional accomplishments.

Coursework

Students ordinarily are expected to take four courses in each semester for their first two years, including Psyc 301 Problem, Theory, and Method in Psychology and Psyc 302 Statistical Methods in their first year. In subsequent years, students continue to enroll in a full program which ordinarily includes three or four content courses and research and reading courses. A total of at least 16 one-semester content courses is required for admission to candidacy for the Ph.D. There are special course distribution requirements in effect for clinical students, and clinical applicants should consult the section on Training in Clinical Psychology for information about course requirements. Content courses include: all graduate seminars; clinical methods courses; Statistical Methods; Problem, Theory, Method; and courses numbered 300-379 & 390-399 (Topics are similar to Capstone Seminars but are treated in greater depth). Up to four directed readings courses may be taken as content courses after the second year and with the supervising faculty member's approval.

Research in the First Year

To encourage each student to become actively involved in research from the beginning of graduate training, a research apprenticeship program exists through which faculty and students can voluntarily begin working on research together during the first year. Participating faculty provide a brief description of current research projects in which students can become involved or notify students about when their project meetings are held. During the first two weeks of each year students have the opportunity to consider these projects and contact a faculty member to discuss becoming an apprentice in the described research project.

Qualifying Projects

In order to advance to candidacy for the doctoral degree, students must complete six elements of a Qualifying Portfolio by the end of their third year in the program. Students are expected to complete two elements per year to stay on track towards completion of the portfolio.

lio. Elements may be papers written under the supervision of a faculty member, manuscripts submitted for publication, conference presentations, or grant proposals. Students are expected to form a Qualifying Committee of three faculty members by the end of their first semester, with the primary research advisor serving as chair. The committee oversees and approves elements of the portfolio. The students is responsible for maintaining steady progress of the portfolio and for meeting stated deadlines. Written feedback regarding progress on the portfolio will be provided bidirectionally each year by the student and the primary research advisor.

Examination in Statistical Methods

Students are required to demonstrate competence in statistical methods by satisfactory performance on an examination in that area. The examination is normally taken in two parts during the student's first year, at the completion of each semester of the course in Psyc 302 Statistical Methods.

M.A. Degree

The M.A. degree, a required step in our Ph.D. program, is awarded after satisfactory completion of at least eight one-semester courses or their equivalent; and the execution of an empirical thesis under the supervision of a faculty member. All second-year students will present their master's theses at a departmental conference in May. In addition, a brief write-up in the form of a journal article is required for award of the degree. Students who have not completed their M.A. degree at the end of the second year are not permitted to enroll in courses in the spring semester of the third year. Instead, their status becomes Special Resident, which means they must register for Directed Readings for at least three units to be in residence while working on the M.A. requirements. Students who do not complete the M.A. degree by the end of the third year ordinarily are not permitted to continue in the Ph.D. program, but are given ample opportunity to complete a master's degree.

Ph.D. Dissertation Proposal Defense

Once in final form, the dissertation proposal will be presented and defended by the candidate in a meeting with the three faculty on the dissertation committee. This defense, which is based on questions and discussions (no presentation of the proposal) is intended to demonstrate the candidate's command of the relevant base and of the rationale of the proposed study, and the candidate is expected to be able to substantiate theoretical and procedural aspects of the research. It is expected that the proposal presented will be satisfactory in substance in most cases, since it will normally be developed in consultation with members of the candidate's dissertation committee.

Ph.D. Dissertation

Students demonstrate the ability to conduct research by the presentation of an acceptable dissertation. The topic of the dissertation usually is selected by the student working with one or more members of the faculty. Once students have worked out a general research plan, a dissertation committee is formed to supervise and assist in all phases of the research effort, from articulation of the research design to the write-up of the final draft. After completion of the research, students submit a draft of the dissertation to the committee, which will aid students in making necessary revisions. At the point that the committee decides that the dissertation is complete and ready for presentation, the oral examination is scheduled.

Ph.D. Oral Examination

Following submission of the dissertation, a final two-hour oral examination is held in which students present and defend their dissertation. The dissertation will be presented publicly to the psychology faculty and graduate students (and guests where appropriate), and open to questions from the faculty. The format is similar to that of a professional presentation (job talk or colloquium). The candidate is expected to demonstrate his/her ability to address questions on the theoretical frame, the substantive questions, and the findings of his/her work and

on related matters, both from experts in their immediate area and from broadly informed members of the audience. The dissertation oral will include the committee and an additional two or three faculty members appointed by the Department Chair. The selected readers must be specialists in the field (at the level of Ph.D. or its equivalents), including affiliated, adjunct faculty, visiting and post-doctoral scholars, aside from full-time faculty. In case of expertise needed, committee members may be invited from other universities to participate in the final oral examination. Optimally, all faculty with generally related interest and knowledge will attend. The oral will be chaired by the Department Chair or designee. The Ph.D. must be completed in six years (excluding an internship year or official leave). An additional year may be granted by faculty approval of a petition on other grounds, such as part-time study because of financial necessity.

Graduate Training in Clinical Psychology

The basic philosophy in the training of clinical psychology students, as for all graduate students in the Department, is that specialization, necessary as it is, is a process of individualization and emphasis rather than one of restriction, isolation, and compartmentalization. Our aim is to provide an integrated series of intensive educational experiences in class, laboratory, and in practicum clinical settings (in the University and in other agencies) in which specialist training in clinical psychology is attained along with increasing competence in general psychology, theory, and research. It is our hope that these aims and training procedures will equip our graduates to deal with special problems in clinical psychology from the vantage point of knowledge about contents and methods of other areas of psychology. It is assumed that this perspective will develop inquiry-oriented psychologists with creative-integrative approaches to clinical problems and their relationship to psychological knowledge. We believe that such broadly trained psychologists can be flexible enough to (1) meet the varied demands within the different settings in

which the clinical psychologist currently functions; and (2) innovate conceptual approaches and methods of clinical psychology. All members of our clinical faculty, full-time and part-time, have clinical activity as part of their own day-to-day functioning, in addition to their research.

The Clinical Training Program includes course work and practice with adults and children. In addition to more traditional training, the program offers opportunities in child clinical and marital and family intervention.

The program for the Ph.D. in clinical psychology has, in addition to the general requirements, the following special requirements. Each student must take at least one course from each of three areas: (1) biological aspects of behavior (e.g., physiological psychology, behavior and evolution, human neuropsychology); (2) cognitive-affective aspects of behavior (e.g., symbolism, cognitive development, logical reasoning, action and emotion); and (3) social aspects of behavior (e.g., interpersonal relations, social cognition). Each student must take Psychopathology, Theories of Psychotherapies, and Historical Backgrounds of Contemporary Psychology. Each student must complete a minimum of one year of internship in clinical settings. All clinical students participate for four years in practicum training offered at the University or other agencies. For further information contact the Director of Clinical Training. The Clinical Psychology program is currently accredited by the American Psychological Association (APA). For more information, the APA Committee on Accreditation can be contacted at 750 First Avenue, N.E., Washington, D.C. 20002-4242, (202) 336-5500, (202) 336-6123 TDD.

Graduate Study in Developmental Psychology

The developmental psychology curriculum is intended to prepare students for a career in research, teaching, and scholarly activity. It strives to impart both theoretical sophistication and competence in observational, experimental, interpretative, and comparative

inquiry with regard to developmental issues. Emphasized are ways of representing and examining all life phenomena, rather than focusing exclusively on a particular population (e.g., infants, children, adults) or a specific subject matter. In-depth study is offered with particular populations and in specific areas bridging social, cognitive, and language development. In addition to requirements common to all graduate students, those with a concentration in developmental psychology are required to enroll for two semesters in Psyc 300 Developmental Psychology Forum and take a series of six developmental seminars. Since there are no sharp separations between different areas within the department, students who work primarily in developmental psychology have the opportunity to study with other faculty in the department who have an interest in their area of specialization.

Distinctive features of the program include a strong interest in theoretical perspectives, concern with the relationship between problems and methods of inquiry, and an attempt to place questions in their historical and cross-disciplinary contexts. Faculty interests intersect around topics in the development of psychological processes in societal and cultural context, specifically in the development of conceptualization and reasoning, in the study of social relations and interpersonal interactions, in the development of languages, symbolization, and communication, and in the study of the relation of environmental conditions to functioning.

Research facilities in the Department include a Child Study Area. There are opportunities for research in the schools and in other community settings. The Goddard Library has an extensive collection of books and journals going back to the inception of graduate study in psychology in the U.S. Computer facilities are available on campus and in the Department. For additional information about study in developmental psychology, write to Dr. Nancy Budwig (nbudwig@clarku.edu).

Graduate Study in Social-Personality Psychology

This program is organized around two foci: Emotional processes, and societal peace and conflict. Research on emotional processes includes studies on the relation between body, behavior and emotional experience, the relationship between emotional experience, semiotics and social action, and examinations of emotional development, evolution and management. Research on peace and conflict includes work on inter-group conflict, nonviolent action, and the relationship between collective emotions and cultures of peace. It is facilitated by links with faculty from other disciplines in the University's Peace Studies Program.

The program is ideal for graduate students who are committed to tailoring a program of study in emotional processes, or peace and conflict, or evolutionary or health psychology. Its flexibility (there are only three required courses) enables students to build a program that takes advantage of faculty with varied perspectives (behavioristic, cultural, evolutionary, phenomenological, psychodynamic) who respect one another and collaborate on research. This flexibility is manifested in networks of collaboration that link professors and graduate students by particular scholarly interests. Currently, groups of faculty and graduate students are meeting around the themes of aggression, attachment theory, assessment of cultures of peace, and health psychology.

For further information, contact Dr. Joseph de Rivera at jderivera@clarku.edu.

Graduate Study in Other Areas

Other current interests of the faculty include feminist cognition, cognition and instruction, evolutionary psychology, and the psychophysics of taste and smell. Teaching and research emphasize theoretical relevance and preserving and exploring the connections among areas of specialization. Faculty and students typically maintain extensive and regular interactions. In particular, most of the faculty have close connections with the developmen-

tal and social-personality areas. The Department also has education research ties with a number of institutions in the Worcester-Boston area (e.g., the Neuropsychology Unit of the Boston Veterans Administration Hospital, the Worcester Foundation for Experimental Biology, the University of Massachusetts Medical School), as well as other departments at Clark. For further information, write to the chair of the department.

Postdoctoral Training

The Psychology Department and the Heinz Werner Institute provide postdoctoral training. In addition to individually oriented research and training opportunities, seminars are available for postdoctoral students.

Courses

101 GENERAL PSYCHOLOGY/LECTURE, DISCUSSION

Introduction to the principles of human behavior. No prerequisite. Unless otherwise noted, this course is a prerequisite to all other psychology offerings. Discussion attendance required. Mr. Laird, Mr. McHale/Offered every semester

105 QUANTITATIVE METHODS/LECTURE

Introduction to descriptive and inferential statistics for the social sciences. Prerequisite: Psyc 101. Ms. Vinden, Mr. Laird/Offered every semester

107 APPROACHES TO PSYCHOLOGICAL RESEARCH/LECTURE, DISCUSSION

Focuses on the role of research in psychological thought and theoretical development, research methods, and the principles of experimental design. Covers the range of methods used by psychologists, including qualitative analyses (participant observation and discourse analysis) as well as the traditional experimental methods. This course is a prerequisite for all laboratory or research courses, unless otherwise noted. Prerequisite: Psyc 105. Mr. Bamberg, Mr. Stevens/Offered every semester

120 INTRODUCTION TO COGNITION/LECTURE, DISCUSSION

Provides an overview of some of the cognitive functions that comprise our mental life as we function in the world, such as thinking, concepts, memory, attention, language, problem-solving and decision-making. The course examines the mental processes that underlie these functions as they have been studied from the perspective of cognitive psychology, and emphasizes how those aspects of thought are interconnected. The assumptions underlying the perspective of cognitive psychology are discussed and the extensions and contributions of that approach to sociocultural, clinical and developmental questions are explored. Ms. Joffe Falmagne/Offered every year

130 PSYCHOLOGY OF LEARNING/LECTURE

Focuses on historical and current issues in the psychology of learning. Topics include classical and operant learning, the role of language and cognition, and continuity and discontinuity in human and non-human species. Mr. Addis, Mr. Stevens/Offered periodically

135 THE PARADOX OF ANIMAL SOCIALITY/LECTURE, DISCUSSION

Evaluates a new evolutionary perspective called sociobiology by examining Darwinian theory as it applies to animal social organizations. The course redefines such concepts as natural selection, adaptation, communication, personality, emotions, grouping, and territoriality as they apply to animal behavior. This course is run with much class discussion and emphasis on questioning theories, constructing new models, and arriving at new, clearer definitions. Prerequisite: Introductory biology or psychology normally required, but open to freshmen with special qualifications; see instructor. Mr. Thompson/Offered every year

136 HUMAN INSTINCT, ANIMAL MIND/LECTURE, DISCUSSION

Explores the relation between animal and human psychology, first looking at humans as animals, then exploring human-like qualities, such as mind or emotions, as they occur in animals. Mr. Thompson/Offered every year

140 BIOLOGY OF THE BRAIN/LECTURE, DISCUSSION

An introduction to the organization and function of the nervous system. Lectures focus on the human brain with reference to knowledge obtained from animal models. Includes basic information about the anatomical, physiological, and chemical properties of the brain and how these properties enable us to perceive and move around in the environment.

Laboratory/Discussion sessions include demonstrations of nerve cell signalling, testing of human reflexes and sensory perception, dissections, and discussion of issues that arise in modern neuroscience: understanding the relation between the mind and the brain.

Prerequisite: Biology 101 or permission.

Ms. Kennedy/Offered every year

141 BRAIN AND BEHAVIOR/LECTURE, DISCUSSION, LABORATORY

An exploration of how specific neural systems are involved in various behaviors. Emphasizes first, systems where the relationships between brain and behavior are best understood, such as perception, motivation, mood, emotion, sleep and consciousness, language, and attention. Second, information from the frontiers of neuroscience about how the biology of the brain changes as the result of experiences of the individual, including mechanisms for learning and memory, is discussed. Laboratory consists of original research, as a group, on an unsolved problem in modern neuroscience.

Prerequisite: Biology/Psychology 140.

Ms. Kennedy/Offered every year

142 SENSATION AND PERCEPTION/LECTURE

Sensation, perception, and cognition work together to give us meaningful information about the world. This course examines how information is picked up from the environment and then coded, transformed, and integrated by the sensory systems, with special emphasis on vision. Topics include basic visual and auditory functions, vision abnormalities and deafness, color perception, visual illusions, pain, and how babies perceive the world.

Ms. Wiser/Offered every year

145 PSYCHOPHYSIOLOGY/LECTURE

Deals with how the activities of the body outside of the central nervous system interact with, reflect, or produce psychological states and processes. Topics will include the functioning of the autonomic nervous system; techniques for measuring autonomic and other bodily activities; the role of bodily activities in emotions and other feelings; lie detection; the impact of stress on autonomic functioning and on immune system function; the effects of meditation, exercise, and biofeedback on physiology and experience. Mr. Laird/Offered every year

150 DEVELOPMENT IN CHILD AND ADOLESCENT/LECTURE

Discusses the development of cognitive and social functioning in the child and adolescent. Emphasizes and contrasts theoretical approaches to conceptualizing changes in developing children in light of current studies. Mr.

Bamberg, Ms. Budwig, Ms. Reese/Offered every year

156 CULTURAL PSYCHOLOGY/LECTURE, DISCUSSION

Provides a systematic overview of knowledge about cultural organization of human psychological functions, and how psychology as a research discipline can study these functions. Strong theoretical and methodological orientation is included. Mr. Valsiner/Offered every year

158 DISCOURSE, SUBJECTIVITY, AND SELF/LECTURE, DISCUSSION

Provides a multiple perspective approach to subjectivity and the self: biological, cognitive-experimentalist, experiential, social constructionist, and psychodynamic. Examines the role of discourse in how the self is constructed with special emphasis on developmental aspects. Mr. Bamberg/Offered periodically

170 SOCIAL PSYCHOLOGY/LECTURE, DISCUSSION

Examines love, fear, conflict, and other basic processes involved in group dynamics, interpersonal relations, community psychology, inter-group relations, organizational behavior, and

the interface between human nature and culture. These basic processes are related to the attempt to achieve a world of peace and justice. In addition to quizzes and a final exam, students are asked to apply their knowledge of basic processes in a personal or political action. Prerequisite: Psyc 101 or instructor's permission. Mr. de Rivera/Offered every year

172 PSYCHOLOGY OF PERSONALITY/LECTURE

Considers theories regarding behavioral differences among persons in response to the same or similar situations; includes typological, trait, psychoanalytic, traditional and neo-behavioristic, and personological conceptions. Staff/Offered every year

173 INTRODUCTION TO ABNORMAL PSYCHOLOGY/LECTURE

Discusses the manner in which abnormal behavior has been traditionally defined and the implications of these definitions. Provides a comprehensive overview of the major categories of abnormal behavioral disorders with an emphasis on theory and research (e.g., schizophrenia, affective disorders, substance abuse, eating disorders, etc.). Special attention is paid to issues of assessment, intervention, legal issues, and prevention. Prerequisite: Psyc 172. Ms. Grolnick, Mr. McHale/Offered every year

175 INTRODUCTION TO CLINICAL PSYCHOLOGY/LECTURE, DISCUSSION

Surveys various approaches to clinical assessment and intervention. Emphasizes the assumptions underlying alternative approaches, and the actual activities of clinical psychologists. This course also covers special topics including ethics, health psychology, clinical neuropsychology, and forensic psychology. Mr. Addis/Offered periodically

176 INTRODUCTION TO PEACE STUDIES/LECTURE
See Peace Studies 101. Mr. DeRivera/Offered every year

195 PURSUIT OF AN INQUIRY/FIRST-YEAR SEMINAR

Designed primarily for incoming students, this course provides an opportunity to pursue inde-

pendent scholarship in chosen fields. Students must write a substantial term paper by the end of the semester. Class meetings are used to clarify the exposition of ideas and to train the participants in how to exploit the resources of the community for independent scholarship. Papers may be written on any topic. Psyc 101 is not a prerequisite. Instructor's permission. Staff/Offered periodically

201 LABORATORY IN SOCIAL PSYCHOLOGY/LABORATORY, DISCUSSION

General principles of experimental design are learned through the design and performance of original experiments in experimental social psychology. Both group and individual experiments are conducted in any of the usual topic areas of social psychology. Prerequisites: Psyc 105, 107, 170. Staff/Offered periodically

202 LABORATORY IN DEVELOPMENTAL PSYCHOLOGY/LABORATORY, DISCUSSION

A general introduction to conceptual issues related to research in the area of human development. Students participate in group research projects involving observational and experimental techniques and receive training in all phases of research, including formulating research questions, data collection and analysis, and report writing. Prerequisites: Psyc 105, 107, and 150. Ms. Budwig, Ms. Reese/Offered every year

203 LABORATORY IN THINKING PROCESSES/LABORATORY, DISCUSSION

Introduces students to the "how-to" of doing research on reasoning, using both experimental and qualitative, interview-based methods. Students conduct studies on such questions as: what role do prior knowledge, prior beliefs, and logic play in reasoning? how do people reason about the causes of everyday events? how do people draw conclusions from given information? There will be flexibility for students to engage more deeply in content areas of particular interest to them. Prerequisites: Psych 105, 107, and 120. (Psych 120 can be taken the same semester as the lab.) Ms. Falmagne/Offered periodically

204 LABORATORY IN EMOTION AND MOTIVATION/LABORATORY, DISCUSSION

A study is designed to examine how individual or collective emotions influence behavior. Data are gathered, analyzed and reported. Prerequisites: Psyc 105, 107, and instructor's permission. Mr. deRivera/Offered every other year

205 LABORATORY IN TASTE AND SMELL/LABORATORY, DISCUSSION

Discusses concepts of experimental design and method. Experiments are conducted on the scaling of taste, smell, and flavor, such as the comparison of the sweetness and pleasantness of different sugars. Prerequisites: Psyc 105, 107, and instructor's permission. Mr. Stevens/Offered periodically

206 LABORATORY IN PERSONALITY/LABORATORY, DISCUSSION

Examines issues and problems in psychological research in personality, with the problems being exemplified in class and individual studies. Research may be in conventional areas of personality research, such as perceptual defense, motives and performance, self-perception, experimenter influence, and emotions. Prerequisites: Psyc 105, 107, 172. Staff/Offered every year

211 LABORATORY IN COMMUNITY PSYCHOLOGY/LABORATORY, DISCUSSION

Concerned with the prevention of mental-health problems and enhancement of individual functioning through the strengthening and empowerment of communities. Weekly lectures introduce essential principles and methods; in weekly laboratory settings, students design, conduct, and evaluate their own community research projects. Designed for students already actively engaged in neighborhood or community-based initiatives. Prerequisites: Psyc 105, 107, 172, and instructor's permission. Mr. McHale/Offered periodically

212 LABORATORY IN GENERAL PSYCHOLOGY/LABORATORY, DISCUSSION

Students develop skills investigating various aspects of human behavior and experience. Prerequisites: Psyc 105, 107. Staff/Offered periodically

213 LABORATORY IN FAMILY PROCESSES/LABORATORY, DISCUSSION

Examines family-based correlates of early socio-emotional development. Both self-report and observational methodology are used to assess individual, dyadic, and whole family functioning. Topics vary, but may include studies of dyadic and family play; intimate relationships among married couples; family-based correlates of children's school adjustment; and other topics. Prerequisites: Psyc 105, 107, 172, and instructor's permission. Mr. McHale/Offered periodically

214 LABORATORY IN INTERVIEWING/LABORATORY, DISCUSSION

Enables students to use interviews as a research tool productively and responsibly, with emphasis on structured, focus group, and unstructured (qualitative) interviews. The different approaches and techniques will be explored theoretically and with practical exercises. A valuable research prerequisite for doing honors work in the social sciences. Prerequisite: Psyc 107 or instructor's permission. Mr. Bamberg/Offered periodically

215 RESEARCH IN EMOTION/LABORATORY, DISCUSSION

Working in close collaboration with the instructor, students design, conduct, and present a piece of research that investigates an emotional or motivational phenomenon. Instructor's permission. Mr. deRivera/Offered periodically

216 RESEARCH IN HEALTH PSYCHOLOGY/LABORATORY, DISCUSSION

Research in the area of health psychology addresses any issues related to health and disease in individuals and groups; analyses of doctor/patient relationships and particular diseases (acute and chronic) or interest to a student. Faculty members in the area of health psychology are also associated with the Department of Family Medicine and Community Health at Umass Medical School and the Department of Obstetrics and Gynecology at the New England Medical Center in Boston. Prerequisite: instructor's permission. Mr. Bibace/Offered periodically

217 RESEARCH IN THE DEVELOPMENT OF MEMORY AND LITERACY/LABORATORY, DISCUSSION

Students participate in ongoing research projects on the development of autobiographical memory and literacy, particularly as these skills develop in social interaction with others.

Prerequisites: Psyc 150 and instructor's permission. Ms. Reese/Offered periodically

218 RESEARCH IN FAMILY DYNAMICS/LABORATORY, DISCUSSION

Students participate in the design, conduct, and interpretation of experiments in an ongoing research program in family dynamics and child development. Instructor's permission required. Mr. McHale/Offered every year

219 RESEARCH ON MIND IN CONTEXT/LABORATORY, DISCUSSION

Explores the relationship between children's developing understanding of mind, parenting style, and language development. Students join the professor in an ongoing research project. Prerequisite: 107 and instructor's permission. Ms. Vinden/Offered every year

220 RESEARCH IN CHEMORECEPTION/LABORATORY, DISCUSSION

With the instructor, students design, conduct, and interpret research in taste, smell, and flavor. Instructor's permission. Mr. Stevens/Offered every year

221 RESEARCH IN SOCIAL PSYCHOLOGY/LABORATORY, DISCUSSION

Students participate in the design, execution, analysis, and interpretation of research on self-awareness and self-knowledge, including areas of emotions, attitudes, and abilities. Prerequisites: Psyc 105, 107, 170, and instructor's permission. Mr. Laird/Offered every year

222 RESEARCH IN COGNITIVE DEVELOPMENT/LABORATORY, DISCUSSION

Students participate in an ongoing research project in collaboration with the instructor and graduate students. Students participate in designing and conducting studies in schools and daycare centers analyzing data and presenting findings. Recent topics include symbolism in young children, children's ideas about

the physical world, and children's understanding of diseases. Instructor's permission. Ms. Wisner/Offered periodically

223 RESEARCH IN MOTIVATIONAL AND EMOTIONAL DEVELOPMENT IN INFANTS, CHILDREN, AND ADOLESCENTS/LABORATORY, DISCUSSION

Ongoing research on the effects of contexts (home, school, etc) on the emotional and motivational development of children. Instructor's permission. Ms. Grolnick/Offered every semester.

224 RESEARCH ON IDENTITY DEVELOPMENT/LABORATORY, DISCUSSION

Designed to train students in an ongoing research project on the development of subjectivity and identity in and through discourse, particularly narrative discourse. Instructor's permission required. Mr. Bamberg/Offered periodically

225 RESEARCH IN FAMILY AND CHILD/LABORATORY, DISCUSSION

Students participate in ongoing research projects that examine causes of aggression, gender differences, or family issues either with children, adolescents, or parent-child dyads. The research takes place within a cognitive behavioral framework. Instructor's permission required. Ms. Azar/Offered every year

226 RESEARCH IN BIOACOUSTICS/LABORATORY, DISCUSSION

The research analyzes animal and human infant sounds to describe their form and discover their significance. Meets weekly to plan and carry out research projects. Limited enrollment. Instructor's permission and a period of volunteer apprenticeship normally required. Mr. Thompson/Offered every year

227 RESEARCH IN PSYCHOTHERAPY/LABORATORY, DISCUSSION

Studies the process of change in various forms of psychotherapy. Students can participate in the formulation of a question and systematic evaluation of hypotheses pertaining to specific client-therapist interactions. Instructor's permission required. Mr. Addis/Offered periodically

228 RESEARCH ON DEVELOPMENTAL ASPECTS OF TRANSACTIONS OF PERSONS-IN-ENVIRONMENTS/ LABORATORY, DISCUSSION

Discusses theory, findings, and research problems deriving from an ongoing research program—a holistic-developmental, systems-oriented approach to the analysis of transactions of persons-in-environment. A research proposal and final report describing the research project are prepared. Ideally, the research is presented at undergraduate or professional meetings, and a manuscript is prepared for submission to a journal. Prerequisites: Psyc 105, 107, and instructor's permission. Mr. Wapner/Offered every semester

229 RESEARCH IN THE DEVELOPMENT OF LANGUAGE AND LANGUAGE SOCIALIZATION/ LABORATORY, DISCUSSION

Students participate in an ongoing project concerning language development and language socialization research program. Students are responsible for various phases of research, including preparing literature surveys, analyzing data, and interpreting results. Towards the end of the semester, students prepare a written paper describing their work. Instructor's permission. Ms. Budwig/Offered every semester

230 RESEARCH IN CULTURAL PSYCHOLOGY/LABORATORY, DISCUSSION

Provides students with an overview of the empirical research practices in different branches of cultural psychology, and with practical skills in designing and carrying out one's own (or group) project. The projects are expected to continue over the following semesters. Instructor's permission required (and granted for continuing projects). Mr. Valsiner/Offered every semester

240 MEMORY DEVELOPMENT/FIRST SEMINAR

Exposes students to research and theory in the area of memory development. Topics include infant memory and imitation, autobiographical memory, and the effects of stress on memory. Special emphasis is placed on critical analysis of research studies. Prerequisites: Psyc 150 and instructor's permission. Ms. Reese/Offered periodically

241 PHILOSOPHY OF PSYCHOLOGY/FIRST SEMINAR

A philosophical consideration of central concepts and major theories in psychology. Mr. Hendricks/Offered every year

242 EVOLUTIONARY PSYCHOLOGY I/FIRST SEMINAR

An introduction to intellectual history and contemporary data concerning the idea that human behavior is determined by its evolutionary history. Instructor's permission. Mr. Thompson/Offered every year

243 SEMINAR IN PHENOMENOLOGICAL PSYCHOLOGY/FIRST SEMINAR

Describes and analyzes personal experience. Each of the readings describes a different aspect of experience. These are then compared with our own experience of our body, our environment, ourselves, others, our emotions, actions, and thoughts, and with our imagination and our relationship to reality. Mr. deRivera/Offered periodically

244 COGNITIVE DEVELOPMENT/FIRST SEMINAR

This seminar explores the perceptual and cognitive abilities of babies and young children. How does their knowledge of physical objects, space, the biological world, number, and people's minds and behaviors evolve? How does their ability to imitate and communicate develop? How do they learn to categorize and label objects? How does reasoning and problem-solving change with age? Different theoretical approaches will be considered, especially with respect to the role of experience and innate factors in development (the nature/nurture issues). Psych 120 or 150 and instructor's permission. Ms. Wiser/Offered periodically

245 CULTURAL COMPARISONS IN PSYCHOLOGY AND ANTHROPOLOGY/FIRST SEMINAR

Examines the logic of making comparisons between societies and persons. Brings together empirical evidence from psychology, history of culture, and cultural anthropology, and provides an interpretive framework for making sense of such evidence. Different uses of knowledge about comparisons of societies within a society (in the U.S. or other countries)-in

the hands or peace (or war)makers, social policy planners, etc. will be discussed.

Prerequisites: some introductory Geography course, Psyc 101 and 156 or instructor's permission. Mr. Valsiner/Offered periodically.

246 PSYCHOLOGY OF PEACE-MAKING/FIRST SEMINAR

Examines the psychological dimension that is always present in trying to achieve peace and justice within ourselves, in our interpersonal relationships, and in inter-group relations. Topics include political sociology, the management of aggression, negotiation, mediation, forgiveness, and training for the non-violent action necessary to achieve justice. Mr. de Rivera/Offered every other year

247 THEORETICAL MODELS OF COMMUNICATION IN PSYCHOLOGY/FIRST SEMINAR

Provides students with systematic knowledge about the ideas of communication as these have moved between psychology, anthropology, language philosophy, sociology, and cultural studies. Mr. Valsiner/Offered periodically

248 CHILDREN'S UNDERSTANDING OF MIND/FIRST SEMINAR

Explores the development of children's understanding of mind. Topics include precursors to a "theory of mind," primates' understanding of mind, theories of "theory of mind," and social and cultural influences on its development. Ms. Vinden/Offered every year

249 WOMEN IN SOCIETY/FIRST SEMINAR

Examines how women's psychological functioning and development can be understood in societal context, with attention to differences as well as commonalities among women. The seminar first discusses anthropological and sociological examinations of women's cultural status in various societies, and of different women's status within a given society. Economic, historical, institutional, and symbolic processes impinging on the individual (such as societal discourses, language, media, social institutions) are considered, as well as their interconnections. The seminar then discusses individual functioning within that context, covering such topics as women's personal development, life issues of women,

intellectual functioning, and power, and women's roles and functions in society, including issues relating to role choices and adult development. Ms. Joffe Falmagne/Offered every year

250 THEORIES OF FAMILY PROCESSES/FIRST SEMINAR

Exposes students to the major theories of family processes (e.g., biological, psychodynamic, structural, and behavioral views). Focuses on how the family as a system responds to stress, such as developmental shifts, illness, and psychological disorder. Film and literature portrayals of families are utilized. Instructor's permission. Ms. Azar/Offered periodically

251 LANGUAGE DEVELOPMENT/FIRST SEMINAR

A comprehensive survey of the basic issues and topics involved in the study of language development. The course begins with an examination of the structure of language and the varied uses of language in human activity. Against this background the course turns to the question of how children acquire language, with special emphasis on the contributions of cognitive, social, and language-specific factors in this process. Prerequisite: Psyc 150. Ms. Budwig/Offered every year

252 SEMINAR IN AGGRESSION/FIRST SEMINAR

The various forms of aggressive behavior are considered from both a theoretical and practical perspective, with strong emphasis on psychological aspects of aggressive behavior. In addition to obvious forms of aggression, including domestic aggression, homicide, war, and gang violence, aggressive aspects in art, music, sports and the corporate world are considered. Prerequisites: Psyc 173 helpful but not required; instructor's permission. Mr. Rosenbaum, Ms. Azar/Offered periodically

253 NARRATIVE DISCOURSE/FIRST SEMINAR

Relates social, cultural, and historical frames to how people talk, particularly to talk in narrative form. Special emphasis is given to the analysis of discourse and narratives for the way people use talk in order to construe a sense of self and a sense of the other. Prerequisite: instructor's permission. Mr. Bamberg/Offered periodically

255 EXPERIMENTAL SOCIAL PSYCHOLOGY/FIRST SEMINAR

The course will explore in some depth the contributions of experimental research to understanding various Social Psychological phenomena, including Conformity and Obedience, Cognitive Dissonance, Self-concepts, Impression Formation and Attribution, Liking and Interpersonal attraction, Prejudice and Stereotyping, Social Dilemmas, Aggression, Helping and Altruism, and others. Each student will select one such topic, to write a paper on and lead discussion about. All students will read these papers and selected works in these topic areas. Mr. Laird/Offered periodically

257 PHILOSOPHY OF COGNITIVE SCIENCE/FIRST SEMINAR

Investigation of the idea that the mind is a machine that can be studied scientifically. We focus on two proposals for how the mind is structured: the "digital computational" model and connectionist (PDP) architectures. Our examination draws from research in artificial intelligence, cognitive psychology, neuroscience, and philosophy. Mr. Hendricks/Offered periodically

258 DEVELOPMENT OF SENSE OF SELF/FIRST SEMINAR

Examines stages in the development of an adult sense of self from a variety of theoretical perspectives (cognitive, psychoanalytic, sociocultural, dynamic systems). Explores emotion possibilities and vulnerabilities inherent in each successive sense of self, the effects of early socialization experience, multiple pathways, and multiple endpoints (gender and cultural identities). Prerequisites: Psych 150, 120, and instructor's permission. Ms. Griffin/Offered periodically

259 PSYCHOTHERAPIES/FIRST SEMINAR

A variety of methods of reducing symptoms, solving problems in living, and promoting personal development are considered through class discussion and illustration and through intensive reading of primary sources.

Prerequisites: Psyc 172 and instructor's permission. Staff/Offered every year

261 HUMAN NEUROPSYCHOLOGY/LECTURE, DISCUSSION

Approximately ten prominent lecturers review and discuss current research. Topics include overview of brain organization, brain electrical potentials, cerebral dominance, neuroanatomy and pathology of language, bilingualism, emotion, and psychosurgery. Year-long course; divisible. Open to advanced undergraduates and graduate students. Ms. Oscar-Berman, Ms. Kaplan/Offered every year

263 CONTEMPORARY FAMILY RESEARCH/CAPSTONE SEMINAR

Bridges the fields of family theory and therapy with contemporary family research. Examines major schools of family therapy (psychoanalytic, structural, strategic and family of origin), and considers themes and trends in current family research. Special attention is given to gender and coparenting issues in the family. Students take an active role in researching and presenting topics of interest. Instructor permission required. Mr. McHale/Offered periodically

264 THEORY AND RESEARCH IN SOCIAL AND PERSONALITY DEVELOPMENT/CAPSTONE SEMINAR

Explore theories and research on the socialization and individuation (and their interaction) of the developing infant, child, and adolescent. Highlights contributions of the child, the family, the larger sociocultural context, and their interplay. Topics covered include parent-child attachment, temperament, peer relations, development of self. Research methods and analysis in developmental research (e.g., modeling growth and change) will be addressed. Ms. Grolnick/Offered periodically

265 MEN AND MASCULINITY/CAPSTONE SEMINAR

Explores topics related to the construction and experience of masculinity and the male gender role in different social contexts. Applies current theories of gender role socialization to families, seeking help, men's health, friendships, sports and diversity. Instructor's permission required. Ms. Addis/Offered periodically

267 ADVANCED TOPICS IN EVOLUTIONARY PSYCHOLOGY/CAPSTONE SEMINAR

Each year, the participants focus on a different literature that brings Darwinian concepts to bear on problems in the field of Psychology. In recent years, the seminar has focused on the problem of altruism, Darwinian Medicine, and Evolutionary Psychiatry. Mr. Thompson/ Offered periodically

268 COMMUNICATIVE DEVELOPMENT/CAPSTONE SEMINAR

Focuses on various approaches to an understanding of human communication from an interdisciplinary perspective. Explores the relationship between social, cognitive, and linguistic factors in children's communicative development. Prerequisite: Psyc 150 and a First Seminar. Ms. Budwig/Offered periodically

270 ADVANCED TOPICS IN SOCIAL PSYCHOLOGY/CAPSTONE SEMINAR

An intensive treatment of selected areas in social psychological research and theory, including consistency theories in attitude formation and in interpersonal perception; attribution theory in self-perception; and social/situational determinants of normal, everyday behavior and of antisocial behaviors such as violence, criminality, and riots. Ordinarily limited to senior majors in psychology or sociology. Instructor's permission. Mr. Laird/ Offered periodically

271 SOCIAL, CULTURAL, AND EVOLUTIONARY PERSPECTIVES ON TERRORISM/CAPSTONE SEMINAR

The psychological and social roots of terrorist activities and mindset will be examined through investigation of the classic knowledge in social, cultural, and evolutionary psychology. Mr. Laird, Mr. Valsiner, Mr. Thompson/ Offered periodically

272 IDENTITY FORMATION/CAPSTONE SEMINAR

Explores the construction of adolescent and male identities in socio-historical contexts. Particular emphasis is placed on the socio-historical concepts of adolescence and masculinity as 'Discourses', and how young males between 10- and 15-years of age position

themselves vis-à-vis these Discourses in their own talk. Prerequisite: Psych 214 or 253. Mr Bamberg/Offered periodically

273 INTEGRATIVE SEMINAR IN PSYCHOLOGY/CAPSTONE SEMINAR

This course provides an opportunity for undergraduates to participate in the Department's Integrative Faculty Forum. The instructor will assign readings to prepare the students for each week's forum and assist each participant to prepare a paper that deepens his or her understanding of one of the central themes of the Forum's discussions. Staff/Offered every semester

275 CONCEPTUAL APPROACHES TO THINKING/CAPSTONE SEMINAR

This capstone seminar provides a theoretical and methodological frame for studying how thinking is shaped by the societal context in which the person is situated, by the social location the person occupies in that context, by the cultural discourses in which he/she participates, and by the nature of what is being thought about. The seminar draws from readings from interdisciplinary sources, including psychology. The emphasis of the first part of the course is theoretical and methodological. Students then apply these notions to an independent mini-research project, with ongoing class discussion of the formulation, conduct and data analysis of this project. Instructor's permission. Ms. Joffe Falmagne/Offered periodically

276 ADVANCED TOPICS IN CULTURAL PSYCHOLOGY/CAPSTONE SEMINAR

Devoted to a specific subtopic unique for each semester. Designed for seniors and graduate students. Official permission not needed, but contact the instructor for specific topic. Mr. Valsiner/Offered every fall semester

278 ETHNOPSYCHOLOGY/CAPSTONE SEMINAR

Explores how folk psychologies (i.e., what it means to be a person) vary from culture to culture, whether there are certain universal characteristics of all folk psychologies, and how to understand the similarities and differences across cultures. Ms. Vinden/Offered periodically

279 BASIC DEVELOPMENTAL THEORIES/CAPSTONE SEMINAR

Provides a systematic overview of core ideas in the selected theories and guides students to analyze these from the viewpoint of how theories relate with phenomena of development as well as empirical research practices. Instructor's permission. Mr. Valsiner/Offered periodically

282 SELF AND EMOTION/CAPSTONE SEMINAR

Focuses on the processes by which self-knowledge and self-awareness are developed and maintained. Other topics include the development of self-conceptions, self-consciousness, the understanding and control of one's own actions, self-blame, and the effects of actions on attitudes and feelings. Instructor's permission required. Mr. Laird/Offered periodically

283 HISTORICAL BACKGROUND OF CONTEMPORARY PSYCHOLOGY/CAPSTONE SEMINAR

Includes an appreciation of the generative ideas and world hypotheses underlying contemporary psychological approaches and traces the earlier manifestations of these ideas and world hypotheses in intellectual history or history of ideas. Instructor's permission. Mr. Kaplan, Mr. Valsiner/Offered periodically

284 RESEARCH INTERVIEWING/CAPSTONE SEMINAR

Interviewing is frequently relied upon as method for obtaining "data" in studies. Interviews are also an intrinsic aspect of many disciplines in the faculty of Arts & Sciences as well as medicine. The course will review traditions utilized by various disciplines (ethnographic; medical interviewing including the 'history of history taking' in medicine; focus groups in political science and so on) and diverse specialties in psychology including clinical, developmental, and industrial psychology. This course will be open to advanced undergrads and doctoral students in psychology. Instructor's permission. Mr. Bibace/Offered periodically

285 EMOTION AND INTERPERSONAL RELATIONSHIPS/CAPSTONE SEMINAR

What are emotions and how do they affect our behavior and our relationships? The course

examines a number of theories. Prerequisite: First Seminar and instructor's permission. Mr. deRivera/Offered every other year

290 MOTIVATION AND SELF-REGULATION/CAPSTONE SEMINAR

Explores the motivation of human behavior, i.e., what energizes and directs our actions. Examines theoretical and empirical works relevant to motivation, particularly those emphasizing an active organism. Also applies motivational theories to various areas, including education, work, sports, psychopathology, and psychotherapy. Prerequisite: First Seminar. Ms. Grolnick/Offered periodically

292 CAPSTONE RESEARCH IN PSYCHOLOGY/TUTORIAL

Independent study at an advanced level for qualified students. Staff/Offered every semester

293 HONORS IN PSYCHOLOGY: SENIOR YEAR/TUTORIAL

Students carry out a research project under the direction of a faculty member. Department permission required. Staff/Offered every semester

295 ADVANCED TOPICS ON GENDER AND SOCIETY/SEMINAR

This capstone seminar examines selected issues in the study of gender in its societal matrix, where gender is understood in its intersection with 'race', class and ethnicity. The seminar draws from interdisciplinary resources and systematically guides students into scholarly research on specific topics in these areas. Along with class readings and discussions on issues of theory and methodology, students will select a topic of their choice to research in depth and discuss their findings with the class weekly. The course is suitable for psychology seniors and students from other disciplines or programs who wish to pursue psychological questions in this area. Prerequisites: Instructor's permission. Ms. Falmagne/Offered periodically

296 DEVELOPMENT OF KNOWLEDGE/CAPSTONE SEMINAR

The issue of knowledge acquisition is approached from a neo-nativist perspective, i.e., on the assumption that humans have innate cognitive abilities to make sense of the

world. Topics include: the nature of those abilities and how they shape learning in early childhood; the development of everyday knowledge about the physical world, the biological world, and the understanding of people's minds; the development of symbolism; parallel between individual development and history of science; cognitive abilities in animals; the evolution of language, writing and number in the history of our species. Psyc 120, 150, 244 or a First Seminar. Ms. Wiser/Offered periodically

297 SEMINAR IN HEALTH PSYCHOLOGY/ CAPSTONE SEMINAR

Introduces the field of health psychology, covering such topics as stress and the psychosocial causes of illness, modification of problem health behaviors, issues in doctor-patient interaction, psychological effects of chronic illnesses, and the role of the psychologist as a consultant in health-care settings. Instructor's permission. Mr. Bibace/Offered periodically

299 DIRECTED STUDY IN PSYCHOLOGY

Independent study for qualified students. Instructor's permission. Staff/Offered every semester

300 DEVELOPMENTAL PSYCHOLOGY FORUM/GRADUATE SEMINAR

Devoted to the presentation and critique of different approaches to the individual and his/her ways of functioning in the world. The approaches considered may include: Piagetian, nativist, organismic-developmental, cultural/historical or may stem from interdisciplinary perspectives on a selected theme. The aim is to acquaint the participants with sympathetic expositions of several points of view and the application of these viewpoints to some selected topic of inquiry. Different topics are discussed in different years. Mr. Bamberg, Ms. Budwig, Ms. Falmagne, Ms. Reese, Mr. Valsiner, Ms. Vinden, Ms. Wiser, and others/Offered every year

301 PROBLEM, THEORY, AND METHOD/GRADUATE SEMINAR

During the first semester, each faculty member meets once with the class to discuss his/her

perspectives and research. Students prepare brief reports characterizing the links among each faculty member's perspective, research, problems, and methods. During semester two, students formulate proposals, and the methods and ethics of research are discussed.

Staff/Offered every semester

302 STATISTICAL METHODS/SEMINAR

The first semester is devoted to a review of the basic concepts of statistics, such as probability, statistical inference, sampling distribution, t-test, and regression, and to nonparametric statistics. The second semester introduces analysis of variance and experimental design. Ms. Wiser, Mr. Stevens/Offered every year

303 ADULT ASSESSMENT/GRADUATE CLINICAL SEMINAR

Introduces measurement in clinical psychology (first semester) and intellectual and projective testing with adults (second semester). Staff/Offered every year

304 CHILD ASSESSMENT/GRADUATE CLINICAL SEMINAR

Focuses on the administration and interpretation of various assessment instruments for children. Includes intelligence and personality testing and diagnostic interviewing. Mr. Ciottone, Ms. Grolnick/Offered every year

306 QUALITATIVE/INTERPRETIVE METHODS/GRADUATE SEMINAR

Introductory seminar at the graduate level into qualitative research - its conceptual roots, covering the ontological and epistemological concerns, but centering on the methodological issues surrounding contemporary psychological research. Textbook readings will be supplemented with contemporary articles on ethnography, ethnomethodology, discourse and narrative analysis. Mr. Bamberg/Offered periodically

310 THEORIES OF PSYCHOTHERAPY/GRADUATE SEMINAR

Considers the concepts guiding various methods of psychotherapy. Mr. Addis/Offered every other year

311 PSYCHOPATHOLOGY/GRADUATE SEMINAR

Examines the difficulties of defining psychopathology and reviews the major diagnostic categories currently in use from a phenomenological, theoretical, and research perspective. Special attention is given to gender, class, and diversity issues. Ms. Azar/Offered every other year

312 THEORIES OF PERSONALITY/GRADUATE SEMINAR

Examines various theoretical approaches to personal consistency and individual differences. Staff/Offered periodically

316 SENSORY PROCESSES AND PSYCHOPHYSICS/GRADUATE SEMINAR

Discusses psychophysical concepts and methods, including magnitude estimation and multidimensional scaling. Focuses on concepts and methods relevant to studies of taste, smell, and flavor. Mr. Stevens/Offered periodically

317 MORAL DEVELOPMENT/GRADUATE SEMINAR

Attempts to integrate the literatures on moral development and prosocial behavior. Four problems are considered: (1) The relationship between justice and caring; (2) The social development of empathy and responsibility and the personal development of a moral identity; (3) The tension between the search for moral universality and the fact of cultural differences; (4) The relationship between abstract moral reasoning and concrete moral action. Mr. de Rivera/Offered periodically

318 SYMBOLISM/GRADUATE SEMINAR

This course will be of interest to students interested in child development, cognition, and the history of human knowledge. The topic, early symbolism (in the historical as well as ontogenetic sense), has a rich history at Clark University as well as contemporary relevance in cognitive psychology. We will study some of the following areas: the developments of writing, of symbolic verbal communication, and of number in children and in history; magic and myths; symbolization in alchemy and in modern science; children's understanding of models, graphs and maps; and various aspects of mental representation in cognitive psychology. Ms. Wiser/Offered periodically

319 ADVANCED TOPICS IN SOCIAL PSYCHOLOGY/GRADUATE SEMINAR

See Psyc 270. Mr. Laird/Offered periodically

320 ADVANCED TOPICS IN COMMUNICATION/GRADUATE SEMINAR

Provides an overview of theory and research in the area of language development with special focus on functional approaches. Topics vary from year to year. Ms. Budwig/Offered periodically

321 TOPICS IN DISCOURSE ANALYSIS/GRADUATE SEMINAR

Advanced graduate seminar in qualitative methods: Explores the basic question of how meaning is situated in discourse, especially narrative discourse, and how we can 'get hold of it' by methods of analysis. The course then applies some of these issues to ongoing research projects. Mr. Bamberg/Offered periodically

323 THEORY AND RESEARCH IN SOCIAL AND EMOTIONAL DEVELOPMENT/GRADUATE SEMINAR

Explores theories and research on the socialization and individuation (and their interaction) of the developing infant, child, and adolescent. Highlights contributions of the child, the family, the larger sociocultural context and their interplay. Topics covered include parent-child attachment, temperament, peer relations, self development, and sex-role socialization. Emphasizes research methods and analysis in developmental research (e.g., modeling growth and change). Ms. Grolnick/Offered periodically

325 CONCEPTS AND THEORIES IN CONCEPTUAL DEVELOPMENT/GRADUATE SEMINAR

Examines the development of children's knowledge about the physical, biological, and social worlds from a neo-nativist perspective (innate constraints and domain-specificity). Topics include the structure and content of infants' knowledge, processes of knowledge acquisition, relations between individual and cultural knowledge. Related topics include: evolutionary perspectives on knowledge development, concept theory change in history of science, conceptual change in the science classroom, mental models. Prerequisite: permission of instructor. Ms. Wiser/Offered periodically

326 FEMINIST PERSPECTIVES ON SELF, MIND, IDENTITY, AND DEVELOPMENT/GRADUATE SEMINAR

Surveys several approaches that examine how self, mind, and identity are constituted and develop in societal context, with particular focus on gender as one category of analysis, both discursive and material. Selected works illustrating these different perspectives as well as some of their current debates will be studied. Prerequisite: permission. Ms. Falmagne/Offered periodically

327 BASIC DEVELOPMENTAL THEORIES/GRADUATE SEMINAR

Provides a systematic overview of core ideas in the selected theories of development. Covered will be theories of Lamarck, Preyer, J.M. Baldwin, Piaget, Vygotsky, Werner, Kaplan, Gottlieb, Fischer, van Geert. Analyzes theoretical systems from the viewpoint of how these theories relate to the phenomena of development as well as with empirical research practices. Mr. Valsiner/Offered periodically

328 TOPICS IN CONCEPTUAL DEVELOPMENT/GRADUATE SEMINAR

Reviews recent advances in cognitive science related to conceptual development. Topics include various aspects of the neo-nativist approach to knowledge development (e.g., nature of innate abilities, modularity, children's theories in different domains), the development of mental models and analogical reasoning, some neo-Piagetian theories, connectionist models, Dynamic System Theory, evolutionary epistemology, cognitive approaches to history of science, and to science and mathematics education. Ms. Wiser/Offered periodically

330 EVOLUTIONARY PSYCHOLOGY/GRADUATE SEMINAR

An introduction, designed explicitly for clinical, developmental and social graduate students, to the explanation of human behavior by reference to Darwinian Evolution. Mr. Thompson/Offered periodically

331 MULTIVARIATE ANALYSIS/GRADUATE SEMINAR

Introduces students to multivariate statistics. The models, assumptions, data screening, and interpretation of results for factor analysis, multiple regression and multidimensional scaling, for example, are discussed. Mr. Stevens/Offered periodically

333 PRETENSE, IMAGINATION, AND CREATIVITY/GRADUATE SEMINAR

Pretense, imagination and creativity are different but overlapping activities. An examination of theories and experiments, both old and current, will enable us to discuss questions regarding what these activities are, how they develop, and how they function in relation to other areas of the child's development, and in relation to the cultural context in and through which the child is developing. Students will be expected to contribute readings to the course that are related to the core topics and reflect their own interests. Ms. Vinden/Offered

334 CRITICAL PSYCHOLOGY FORUM/GRADUATE SEMINAR

This is an interdisciplinary forum for bringing issues of contemporary social, personality, evolutionary and cultural psychology to be actively discussed by all graduate students. The aim is to acquaint the participants with several opposing views, and to demonstrate how such views can lead to new knowledge. Different topics are discussed in different years. Staff/Offered every year

340 EMOTION AND INTERPERSONAL RELATIONS/GRADUATE SEMINAR

Uses our knowledge of various emotional transformations (e.g., changes in self-boundary) to develop a precise language for the description of interpersonal phenomena such as merger-separation, dynamics, identification, and the dynamics of family constellations. Mr. deRivera/Offered periodically

347 LANGUAGE AND HUMAN DEVELOPMENT/GRADUATE SEMINAR

Introduces students to central debates concerning the relationship between language, thought, and culture. Drawing upon readings from a variety of disciplines including psychology, anthropology, and linguistics, we consider language and context, communicative practices, and how developmental psychologists have thought about the interface between language, thought, and culture. Students have the opportunity to relate ongoing interests to themes from the seminar. Ms. Budwig/Offered periodically

350 MOTIVATION AND SELF REGULATION/GRADUATE SEMINAR

See Psyc 290

351 METHODOLOGIES OF SYSTEMIC ANALYSES OF SINGLE CASES/GRADUATE SEMINAR

The goal is to provide graduate students with knowledge and practical experience of analysis of individual cases (both for research and practice). The seminar covers both qualitative and quantitative approaches to single-case analysis. Mr. Valsiner, Mr. Laird, Mr. Bibace/ Offered periodically

354 THEORY AND RESEARCH IN SOCIAL AND PERSONALITY DEVELOPMENT/GRADUATE SEMINAR

See Psyc 264

355 EMOTIONS AND INTERPERSONAL RELATIONSHIPS/GRADUATE SEMINAR

See Psyc 285

356 INFANT DEVELOPMENT AND MENTAL HEALTH/GRADUATE SEMINAR

Overview of infant development 0-3. First part of course emphasizes normal development, including cognitive, perceptual, motor, and representational development. Second part of course emphasizes normal and problematic regulations (sleep, feeding, self-soothing) and relationship development, and methods of intervention for ongoing problems. Mr. McHale & Ms. Wiser/Offered periodically

361 HUMAN NEUROPSYCHOLOGY/GRADUATE SEMINAR

See Psyc 261

363 CONTEMPORARY FAMILY RESEARCH/GRADUATE SEMINAR

See Psyc 263

364 SEMINAR: DIVERSITY ISSUES/GRADUATE SEMINAR

This course was developed to fulfill the Massachusetts State licensing board requirement for training in issues of cultural diversity. It examines the sociocultural context of human behavior with a particular focus on issues of diversity in the clinical situation. The first part looks at the effects of prejudice and discrimination on individual and group mental health, with a special emphasis on U.S. ethnic minority, immigrant and gender groups. The second part deals with the influence of culture on psychopathology and psychiatric diagnosis. Finally, the third part of the course focuses on topics of diversity in the therapeutic relationship. Staff/Offered every other year

365 MEN AND MASCULINITY/GRADUATE SEMINAR

See Psyc 265

367 ADVANCED TOPICS IN EVOLUTIONARY PSYCHOLOGY

See Psyc 267

368 COMMUNICATIVE DEVELOPMENT/GRADUATE SEMINAR

See Psyc 268

371 SOCIAL, CULTURAL, AND EVOLUTIONARY PERSPECTIVES ON TERRORISM/GRADUATE SEMINAR

See Psyc 271

372 IDENTITY FORMATION/GRADUATE SEMINAR

See Psyc 272

375 SOCIETAL APPROACHES TO THINKING/GRADUATE SEMINAR

See Psyc 275

376 ADVANCED TOPICS IN CULTURAL PSYCHOLOGY/GRADUATE SEMINAR

See Psyc 276

**377 SEMINAR IN HEALTH
PSYCHOLOGY/GRADUATE SEMINAR**

See Psyc 297

378 ETHNOPSYCHOLOGY/GRADUATE SEMINAR

See Psyc 278

**379 BASIC DEVELOPMENTAL
THEORIES/GRADUATE SEMINAR**

See Psyc 279

**380 PSYCHOTHERAPY PRACTICUM/GRADUATE
CLINICAL PRACTICUM**

Supervised experiences in psychotherapy.

Staff/Offered every year

**381 FAMILY THERAPY PRACTICUM/GRADUATE
CLINICAL PRACTICUM**

Family and couple therapy and group parent training. For third-year clinical students.

Mr. McHale/Offered every semester

**382 ADVANCED THERAPY PRACTICUM/GRADUATE
CLINICAL PRACTICUM**

Mr. Bibace/Offered periodically

**383 COGNITIVE AND BEHAVIORAL
ASSESSMENT/GRADUATE CLINICAL PRACTICUM**

Staff/Offered periodically

**384 CONSULTING PRACTICUM/GRADUATE
CLINICAL PRACTICUM**

Mr. Bibace/Offered periodically

**385 CHILD THERAPY PRACTICUM/GRADUATE
CLINICAL PRACTICUM**

Ms. Grolnick, Mr. Ciottone/Offered every other year

**386 NEUROPSYCHOLOGY
ASSESSMENT/GRADUATE CLINICAL PRACTICUM**

Staff/Offered periodically

**387 ETHICS IN CLINICAL PSYCHOLOGY/GRADUATE
CLINICAL PRACTICUM**

For first-year clinical students. Staff/Offered every year

**388 INTERVIEWING PRACTICUM/GRADUATE
CLINICAL PRACTICUM**

For first-year clinical students. Staff/Offered every year

**389 CLINICAL WORKSHOP/GRADUATE CLINICAL
SEMINAR**

For all clinical students in residence. Clinical Staff/Offered every semester

**390 PROGRESS IN PSYCHOLOGY/GRADUATE
SEMINAR**

This seminar will acquaint advanced graduate students with the most recent theoretical, empirical, and methodological thought in the discipline. Staff/Offered every semester

391 MASTER'S SEMINAR/GRADUATE SEMINAR

Provides advanced graduate students with a systematic framework for discussions around their second-year research projects and M.A. thesis work. Staff/Offered every semester

392 SELF & EMOTION/GRADUATE SEMINAR

See Psyc 282

**393 HISTORICAL BACKGROUND OF
CONTEMPORARY PSYCHOLOGY/GRADUATE
SEMINAR**

See Psyc 283

**394 RESEARCH INTERVIEWING/GRADUATE
SEMINAR**

See Psyc 284

**395 ADVANCED TOPICS ON GENDER &
SOCIETY/GRADUATE SEMINAR**

See Psyc 295

**396 DEVELOPMENT OF KNOWLEDGE/GRADUATE
SEMINAR**

See Psyc 296

397 MASTER'S THESIS

Prerequisite: permission of thesis advisor.

Variable credit. Staff/Offered every semester

398 INTERNSHIP

399 DIRECTED STUDY

Prerequisite: permission of instructor. Variable credit. Staff/Offered every semester

SCREEN STUDIES

(See Visual and Performing Arts)

SOCIOLOGY

Program Faculty

Patricia M. Ewick, Ph.D., *chair: research methods, gender, law, deviance*

Parminster Bhachu, Ph.D.: *urban anthropology, immigration, diaspora cultures, nationalism, cultural identities & global processes, new capitalism and markets*

Eric D. Gordy, Ph.D.: *sociological theory, culture, media and communication, political and historical sociology, Balkan societies*

Bruce London, Ph.D.: *environment and society, community, sociology of the Third World, social demography*

Deborah M. Merrill, Ph.D.: *research methods, family, aging, medical sociology, social demography*

Robert J.S. Ross, Ph.D.: *urban studies, political sociology, political economy, social policy*

Shelly Tenenbaum, Ph.D.: *Jewish studies, race and ethnicity, social stratification, gender*

Undergraduate Program

The American sociologist C. Wright Mills described the perspective of sociology as the "sociological imagination." He maintained that this point of view enables individuals to see how their personal lives are shaped by larger social forces. In short, Mills argued, we cannot fully understand ourselves without understanding the society in which we live. At Clark, the study of sociology is committed to developing such an imaginative capacity in students.

Through the examination of social processes, such as social stratification, social movements and social change, and through an investigation of diverse social institutions, such as the law, the family, medicine, and religion, students acquire the conceptual and analytical tools to enhance both their understanding of their own lives and the world in which they live, and the ability to act with reason and

freedom. As a social science faculty, we are concerned about the human situation and the relevance of our scholarship to societal issues and community problems, as well as to our individual lives. We hope to understand the structure and dynamics of human society, on a small or large scale, so that we and our students as citizens can contribute to improvement of the human condition.

One of the questions most frequently asked by students is, "What can I do with a degree in Sociology?" Because of the emphasis placed on critical thinking, analytical and communicative skills, and methodological training, students majoring in Sociology are well equipped to enter a variety of occupations, as well as professional careers and graduate school. Sociology majors have gone to law school, medical school, social work occupations, and business school, as well as public policy and urban planning training programs. Many find employment in human services, government and private businesses. Feel free to discuss your postgraduate plans with the faculty. Also, ask the department secretary for a copy of our department's handbook (revised yearly) and for handouts on employment opportunities and careers.

The sociology major consists of ten courses within the department and a minor, concentration, or a program in the Social Sciences or closely related field. A list is kept current in the Department Office. Currently, the ten departmental courses are divided as follows:

All majors must complete:

010 Introduction to Sociology or 011

Social Problems (students may not receive major credit for both 010 and 011)

105 The Social Research Process

107 Sociological Theory: Classical

200 Class, Status, and Power

Majors are strongly advised to take The Social Research Process (Soc 105) and Classical Theory (Soc 107) prior to the senior year. Classical Theory (Soc 107) is a prerequisite for Class, Status, and Power (Soc 200).

All majors must also complete six additional sociology credits, one of which must be a capstone. At least three of these six courses must be at the 200 level. These credits may be fulfilled through the completion of six regular courses or through a combination of coursework, internships (maximum of two credits), directed reading and directed research. Of the four required courses for a major, three must be taken on campus. Of the ten total courses for the major, six must be taken on campus. Students must earn a grade of C- or better to receive Sociology course credit.

The Capstone Requirement

Sociology majors must take a capstone seminar. To enroll in a capstone seminar, students must have already completed Introduction to Sociology (SOC 010) or Social Problems (SOC 011), Social Research Process (SOC 105), Classical Theory (SOC 107) and a specific course prerequisite in the subject area of your capstone seminar. The capstone seminar will build upon knowledge gained in previous courses and will require a serious research component. All courses between 271 and 296 are capstone seminars. Students may also fulfill a capstone by writing a Senior Honors Thesis.

Senior Honors Thesis

Requires two to four courses in the senior year; designed for students wishing to devote approximately 50 percent of their senior year to a major research problem. Application to the sociology department by those with a 3.2 average in the major must be made by March 1 of the junior year. Complete guidelines are available in the department office.

Minor in Sociology

The Sociology minor consists of six courses, including three of the following required courses: SOC 010, Introduction to Sociology or SOC 011, Social Problems (students may not receive minor credit for both 010 and 011); SOC 105, The Social Research Process; SOC 107, Sociological Theory: Classical; and SOC 200, Class, Status and Power. Classical

Theory (SOC 107) is a prerequisite for Class, Status and Power (SOC 200). At least two of the six courses must be at the 200-level. Four of the six courses must be taken on campus. Students must earn a grade of C- or better to receive Sociology course credit.

Courses

010 INTRODUCTION TO SOCIOLOGY/ VARIABLE FORMAT

Overview of sociology, its areas of study, methods of inquiry, and concepts for the analysis of society. Seeks to understand social structure, social change, and individuals' relationship to them. Fulfills introductory course required for majors. Staff/Offered every semester

011 SOCIAL PROBLEMS/VARIABLE FORMAT

Designed to give students (1) a sense of the sociological perspective, and (2) an introduction to the theories, concepts, methods, and issues that are explored in greater detail in upper-division courses. Examines many major contemporary social problems, such as inequality, institutional racism and sexism, north-south issues, environmental deterioration, and crime. The mix of problems studied changes from semester to semester. Mr. London, Staff/Offered every year

036 RACE AND ETHNICITY ACROSS BORDERS: COMPARING THE LOCAL AND GLOBAL/FIRST-YEAR SEMINAR

Using a comparative framework, this seminar will examine the concepts of race and ethnicity in local, national and global locations. Particular emphasis will be on race and ethnicity in changing cultural and political contexts in an ever changing globally connected world. For example, how have the events of September 11th in New York determined and constructed racial and ethnic identities? What are social, cultural and political dynamics that shape racial identities and ethnic stereotypes? Why do derogatory racial labels get attached to people? How do ethnic groups get defined in volatile contexts? Students will read autobiographies and biographies to explore how formative racial and ethnic experiences have

shaped their own lives and identities and those of others who have documented their lives in books and on film. What can we learn from these racial and ethnic imaginations that can help us theorize race and ethnicity across borders through sophisticated and sensitive theoretical frameworks. Fulfills the comparative perspective. First preference will be given to students in the International Studies Stream. Others will be admitted on a space available basis. Ms. Bhachu

105 SOCIOLOGY RESEARCH PROCESS/LECTURE, DISCUSSION

General introduction to logic, techniques, and ethics of social science inquiry. Reviews qualitative and quantitative methods, as well as sampling. Fulfills the methods requirement for majors. Ms. Ewick, Ms. Merrill, Staff/Offered every semester

107 SOCIOLOGICAL THEORY: CLASSICAL/VARIABLE FORMAT

A critical and comparative survey of the major theorists of early sociology. The course is centered around the “canonical” core of sociological theory as represented by selected works of Marx, Durkheim, and Weber. In addition, some contemporary perspectives are explored. These more contemporary perspectives may include critical theory, psychoanalytic theory, symbolic interactionism, and standpoint theories. Emphasis is placed on differing concepts of social structure, social and historical change, and the meaning of social action. Fulfills the social theory requirement for majors. Mr. Gordy/Offered every semester

110 SOCIOLOGY OF GENDER/LECTURE, DISCUSSION

Focusing on sociological, historical, psychological, and economic dimensions of gender, this course examines the ways in which the social system and its institutions create, maintain, and reproduce gender. The course emphasizes the processes through which gender categories are constructed and represented, as well as the consequences of these categories for the lives of individuals. Ms. Ewick/Offered periodically

125 CITIES AND SUBURBS/VARIABLE FORMAT

Introduces urban sociology. Examines the structure and development of American metropolitan areas and community power, with special attention to changing functions of cities and suburbs. Examines different ways of life in cities and suburbs. Mr. Ross/Offered every year

130 GENOCIDE/LECTURE, DISCUSSION

This course will provide students with a comparative perspective that highlights both theory and concrete examples of genocide. The course will begin with an overview of sociological perspectives that explore structural, cultural, psychological, and political conditions that make the occurrence of and experience of genocidal behavior more probable. After surveying sociological theories of genocide, we will explore four cases of genocide that took place over the course of centuries and across several continents. The course will end with discussion of the prevention of genocide. Mr. Gordy, Ms. Tenenbaum/Offered every year

135 MEDIA AND SOCIETY/LECTURE, DISCUSSION

Analyzes the development, history, and structure of media of mass communication. Examines research on a variety of contemporary issues in the sociology of media. A variety of theoretical and methodological approaches is presented to questions of analysis and effects of communication media. Mr. Gordy/Offered every year

160 GLOBAL CULTURES AND IDENTITIES/LECTURE, DISCUSSION

Explores the impact of local, national, and international forces in the formation of cultural identities at a time of rapid social changes in the 1990s. Focuses on contemporary urban cultures to examine local and national identities as they are globally determined. Emphasizes the elastic and the plastic nature of cultures and the importance of time, place, and space to understand the emergence of new culturally diverse settings. Examines the nature of social and cultural change in local, national, and global economic and political spaces. Ms. Bhachu/Offered every year

175 THE FAMILY/LECTURE, DISCUSSION

Examines the assumed collapse of the American family and the causes of this collapse. Also considers challenges to the new family, such as dual-career couples and the resulting division of labor in the home. Working-class, African-American, and homeless families are also discussed. Ms. Merrill/ Offered every year

180 AGING AND SOCIETY/LECTURE, DISCUSSION

Focuses on the process of aging and older people in our society. Attention is given to the diversity of the aged and the impact of social structures on the aging process. Ms. Merrill/ Offered every year

200 CLASS, STATUS, AND POWER/VARIABLE FORMAT

Analyzes the nature, dynamics, and historical development of social inequality. The economic and political power of the upper class, social mobility, the process of deindustrialization, feminization of poverty, and the intersection of race and class are studied. Mr. London, Mr. Ross, Ms. Tenenbaum /Offered every year. Required for the major. SOC 107 is a prerequisite

203 AMERICAN JEWISH LIFE/VARIABLE FORMAT

Introduction to the social scientific study of American Jewry. Topics include immigration, economic mobility, intermarriage, Jewish feminism, American Judaism, ethnic identity, anti-Semitism, and political behavior. Throughout the semester, comparisons between Jews and other groups are highlighted. Ms. Tenenbaum/ Offered every other year

205 SOCIOLOGY OF THE ENVIRONMENT/ LECTURE, DISCUSSION

Introduction to environmental sociology, a newly emerging area of interest. Focuses on the reciprocal relationships between society and the environment. The theoretical perspectives of human ecology and political economy are used to illuminate topics such as population, technology, and environmental degradation, the environmental movement, north-south environmental conflicts, and food and hunger. Mr. London/Offered every year

225 RELIGION AND SOCIETY/LECTURE, DISCUSSION

This course introduces students to key theoretical and empirical works in the sociology of religion. We apply major theoretical perspectives to contemporary religious life. We ask how individuals find meaning in and are shaped by their experiences of religion. Special consideration is given to how gender, race and ethnicity influence religious life. We explore the rise of new religious movements (historical and contemporary), the relationship between religion and modernity, and elements of fundamentalism and conservatism in Christianity and Judaism. Staff/Offered periodically

231 MEANING, POLITICS, AND DIFFERENCE: SOCIOLOGY OF CULTURE/LECTURE, DISCUSSION

Presents an overview of the principal concepts, frameworks and theoretical approaches currently used in the sociology of culture and samples some of the major contemporary research in the field. The goal is to offer a range of approaches by which sociologists can examine and understand cultural forms and cultural phenomena. Readings focus on relations between culture and history, culture and power, culture and politics, culture and resistance, and culture and local environments. The course is intended to engage contemporary debates in culture, rather than to offer a conclusive and synthetic "definition" of the field. Mr. Gordy/ Offered every other year

232 POPULATION, ENVIRONMENT, AND DEVELOPMENT/VARIABLE FORMAT

Studies the statistical description and analysis of human populations. Focuses on relationships between and among (a) social, cultural, political, and economic forces, and (b) population structures, processes, and characteristics. Such demographic factors contribute to the understanding of social issues, such as the aging of the population, the changing status of women, rapid world urbanization, and Third World economic problems. Mr. London/Offered every year

241 SOCIOLOGY OF MEDICINE/LECTURE, DISCUSSION

Examines the role of health care professionals and the health care industry, as well as health and illness as social phenomena. The course also addresses problems in the health care system at the national level and reviews potential solutions to the mounting crisis in the provision of health services. Ms. Merrill/Offered every year

242 HUMAN RIGHTS AND TRANSITIONAL JUSTICE/LECTURE, DISCUSSION

This course will explore the development of international law in relation to violations of human rights from the signing of the Hague and Geneva conventions to the present. The course will explore what approaches have been tried, the advantages and drawbacks of each, and the recurring dilemma faced by transitional regimes of whether to "trade justice for truth." The principal examples will be: the International Military Tribunals at Nuremberg and Tokyo, the investigative commissions appointed by South Africa, Argentina and Chile, the International Criminal Tribunals for the former Yugoslavia and Rwanda, and the ongoing debate over the founding of the International Criminal Court. Mr. Gordy/Offered periodically

243 POLITICAL SOCIOLOGY/VARIABLE FORMAT

Examines various dimensions of political power in societies. Considers various definitions of power and the state. Empirical studies focus on 1) political communities and political inequalities, 2) states, bureaucracies, and "pressure," 3) political culture and political communication, and 4) revolution. Emphasizes historical, comparative, and international dimensions. Mr. Gordy and Mr. Ross/Offered periodically

244 THE COMMUNITY/LECTURE, DISCUSSION

An analysis of one of the most enduring ideas at the heart of the discipline of sociology: the idea of community. How do we define "community"? What is the meaning of community for individuals and groups? How has the nature of community changed over time? And what are the central concepts, issues, theories, and

methods used by sociologists in the writing of community studies? Mr. London/Offered periodically

249 THE SOCIOLOGY OF DEVELOPMENT AND UNDERDEVELOPMENT/LECTURE, DISCUSSION

Examines and analyzes the transformation of post-colonial, "Third World" societies undergoing capitalist or socialist development. The course discusses theories of development in a social, economic, and demographic context. It also explores the international division of labor, urbanization, and basic needs provision. Mr. London, Staff/Offered periodically

250 CULTURE, CONSUMPTION, AND CLASS IN LOCAL AND GLOBAL CONTEXTS/LECTURE, DISCUSSION

Focuses on political, cultural and ethnic aspects of consumption. Emphasizes how people and groups define themselves through symbols in consumer products. Examines the interplay between the world market and cultural identities, local and global processes, and consumption and cultural strategies to discover the consumer subcultures. Students conduct a small ethnographic project on consumer pattern, product, or culture. Ms. Bhachu/Offered every other year

252 RACE AND AMERICAN SOCIETY/LECTURE, DISCUSSION

Focuses on the political, economic, and social lives of Native Americans, Latinos, African Americans, and Asian Americans. Topics discussed include racism, the civil rights movement, gender, class, popular culture, and public policies. A central assumption of this course is that we must turn to the historical experience to understand contemporary race relations. Ms. Tenenbaum/Offered every year

255 THE CREATION OF NATIONALISM, NATIONALIST CULTURES, AND SYMBOLS/LECTURE, DISCUSSION

At a time of rapid global changes and globalization, nationalisms and nationalist cultures have grown dramatically. This course explores how nationalist identities and resistance are determined by culture and the cultural symbols, such as key consumer commodities, cul-

tural symbols, gender, and language and dress codes. Ms. Bhachu/Offered every other year

**258 WOMEN IN JEWISH CULTURE/LECTURE
DISCUSSION**

Seeks to uncover the experiences of Jewish women and uses gender analysis to enrich our understanding of Jewish life. Raises questions about the status of women in texts, rituals, and communal practices from the biblical period to the present. Ms. Tenenbaum/Offered every other year

**259 SOCIOLOGY OF ORGANIZATION/LECTURE,
DISCUSSION**

Examines the theory and practice of organizations. Students examine major concepts in the historical development of modern organizations (e.g., bureaucracy) and apply their learning to the investigation of contemporary problems and issues of complex organizations. Ms. Ewick/Offered periodically

**260 ROOTS AND ROUTES: IMMIGRANTS,
DIASPORAS AND TRAVEL/LECTURE, DISCUSSION**

Examines immigrants and the cultures they create through movement and settlement and through the many borders they cross. Also covered is the diasporas immigrants create through the travel they undertake both voluntarily and in some cases through forced migration. How do borders, journeys, migration, diaspora shape the identities of individuals, groups, cultural objects and commodities? Ms. Bhachu/Offered every year

262 LAW AND SOCIETY/LECTURE, DISCUSSION

Examines the relationship between law and other aspects of social life. Relying on case studies and other empirical studies of the legal system, particular attention is paid to the following topics: law and justice, crime and social control, law and social change, the legal profession and legality and everyday life. Ms. Ewick/Offered every other year

263 DEVIANCE/VARIABLE FORMAT

Why are some behaviors, differences, and people stigmatized and considered deviant while others are not? This course examines theories

of social deviance that offer answers to this and to related questions such as: how and why are behaviors designated as deviant; how do individuals enter a deviant lifestyle; and how do various social statuses, such as sex, affect the incidence, type, and responses to deviant acts. Ms. Ewick/Offered periodically

**265 QUEST FOR JUSTICE: STUDY OF SOCIAL
MOVEMENTS/VARIABLE FORMAT**

Modern American movements (feminist, civil rights, etc.) are used as examples for discussion of social movements. Problems of recruitment, organization, and ideology are analyzed. The form of the course depends on the number of students registering. Mr. Ross/Offered periodically

**270 EDUCATION AND INEQUALITY: RESEARCH AND
WRITING**

Focuses on the relationship between social class and the institution of education, on the effect that social class has had on both the production and reproduction of our educational system, and on the connection between schooling and unequal educational opportunity. Mr. London/Offered every year

273 EFFECTS OF MASS MEDIA/SEMINAR

The first half of the semester will be devoted to exploring the history and development of the most influential approaches to the study of effects. During the rest of the semester we will explore some critical contemporary issues through the lens of effects research. Groups of students will develop and carry out an original research project over the semester, and present the findings to the campus community. Prerequisite: Soc 135 or instructor's permission. Mr. Gordy/Offered every other year

**275 FAMILY ISSUES IN AN AGING
SOCIETY/SEMINAR**

Examines how the aging of our society has affected family life for both elders and younger generations. Particular attention is paid to the topic of family caregiving. Emphasizes a life-course perspective and gives attention to the

impact of mid-life family events on later life relationships. Prerequisites: SOC 175 or SOC 180. Ms. Merrill/Offered every other year

282 CONTEMPORARY SOCIOLOGICAL THEORY/SEMINAR

Examines various currents in sociological theory which developed during the last half of the 20th century. Considers relationships between social theory, political ideology, and power. Topics may include, but are not limited to, feminist theory, cultural theory, globalization, and critical theory. Mr. Gordy/Offered occasionally

285 POVERTY/SEMINAR

Analyzes who is poor and how government policy affects the poor. Compares the US experience to Western Europe, and addresses the question of whether there is a permanent underclass of poor people. Additional issues of policy and analysis vary by year. Prerequisite: Soc 200 or instructor's permission. Mr. Ross/Offered every other year

288 GLOBALIZATION: STRUCTURE AND DYNAMICS/SEMINAR

Examines processes of economic and social development. Focuses on changes in the structure. Of industrial regions of the advanced capitalist countries, and changes in the structure of developing and more peripheral regions. The conceptual framework is that of a global capitalist system undergoing significant transformation in the development of labor and capital. Prerequisites: SOC 200 or instructor's permission. Mr. Ross/Offered periodically

290 CITIES IN GLOBAL PERSPECTIVE/SEMINAR

Based on three dimensions of comparison: historical; cross-national within advanced capitalism; and a contrast between the processes and structures of urbanization in the First and Third Worlds. Prerequisites: SOC 125 or instructor's permission. Mr. Ross/Offered periodically

294 GLOBAL ETHNOGRAPHIES: ETHNOGRAPHERS IN THE MAKING FOR THE 21ST CENTURY/SEMINAR

Focuses on emergent ethnographic concerns which attempt to capture fluid cultural processes and connections as they unfold in late 1990's global arenas. Deals with multiple-sited ethnography of movement, displacement, replacement, and the global traffic in culture. It also analyzes "traditional" ethnographies and ethnographic methods of the founding pioneers, including the work of the famous Clark University ethnographer Franz Boas. Prerequisites: SOC 160 or instructor's permission. Ms. Bhachu/Offered every year

296 INTERNSHIP SEMINAR

Focus changes each year depending on faculty interest. Foci include gender, community organizing, and aging.

298 THESIS STUDIES

Independent study submitted for honors consideration for senior sociology majors. Students should sign up with the faculty member whose areas of interests are most suited to their own. The emphasis is on independent research undertaken with faculty guidance and supervision. Generally requires two credits in each semester of the student's senior year and culminates in a thesis submitted for honors consideration. Staff/Offered every year

299.1 DIRECTED READINGS IN SOCIOLOGY

Staff/Offered every semester

299.2 DIRECTED RESEARCH

Staff/Offered every semester

299.5 SPECIAL PROJECTS

Staff/Offered every semester

299 SEC. 9 INTERNSHIPS IN SOCIOLOGY

Supervised field training in community and organized settings is available. Internship is the equivalent of one to four full courses in sociology. Variable credit. Staff/Offered every semester

THEATER ARTS

(See Visual and Performing Arts)

VISUAL AND PERFORMING ARTS

Rhys F. Townsend, Ph.D., chair: *Ancient art and archaeology*

Visual and Performing Arts is composed of individual academic programs in art history, studio art, music, screen studies, and theater arts. Whether students prefer to study the history, criticism, philosophy, and theory of the arts or to engage in the creative activity of studio work, composition, or performance, there are courses, concentrations, minors, specializations, and majors available. A major in a given area can be the core for a preprofessional program; or, the student may cross traditional disciplinary lines—by double majoring, for instance, or by designing a major or combined major that includes two or more areas of study. Students, with a program director, may develop a four- or five-course sequence as a minor or an area of specialization. Majors and nonmajors are welcome to attend the many art exhibitions, film presentations, and musical, theatrical, and dance performances.

The department of Visual and Performing Arts is part of the Higgins School of Humanities.

Because art reflects the trend of thought and the impact of events of its time, it relates to many other areas of study—history, philosophy, and psychology. The study of art thus enhances one's understanding and appreciation of other disciplines. For students interested in the arts, humanities, or social and natural sciences, the study of art can provide both majors and nonmajors with an especially enriching part of liberal arts education. Courses in art offer opportunities to develop critical skills, acquire resources for visual thinking and communication, and engage in personal creative expression. For both future art scholars and professionals, Clark's art programs provide a solid foundation that will serve them well in their graduate studies or careers.

ART HISTORY AND CRITICISM

Program Faculty

Bonnie L. Grad, Ph.D.: *Modern art*
Gauvin A. Bailey, Ph.D.: *Renaissance and Baroque art; Asian art; Latin American art*
Rhys F. Townsend, Ph.D.: *Ancient art and archaeology, program director*

Visting Lecturers

Monica Kjellman, Ph.D. *candidate*

Adjunct Faculty

Jean Borgatti, Ph.D.
Peter E. Nulton, Ph.D.
Catherine W. Titus, Ph.D.

Emeritus

Samuel P. Cowardin III, Ph.D.

Undergraduate Program

The Art History major focuses on the visual arts and the social, cultural, and historical context in which art is created. Majors may specialize in Ancient, Renaissance and Baroque, and Modern art history, or other areas. For those considering teaching, museum and gallery work, arts conservation, or arts management, the major is designed to meet the student's needs and may include an internship at an appropriate institution.

The Art History Major

A total of 14 courses are required, 10 of which are art history courses.

Requirements:

1. Art History Courses

- a. 010: From the Stone Age to Our Age (or equivalent course or superior advanced placement performance)
- b. 151: Methodology and Historiography
- c. Eight courses in the following areas:
Ancient, Renaissance/Baroque, Non-Western, Modern, with at least one but not more than two courses in any one area; a total of three must be at the 200 level.

2. Related Courses

Four courses in V&PA, of which two must be in Studio Art. These courses must be selected in consultation with the advisor.

Double and Combined Majors

Because of its interdisciplinary nature, students may wish to double major in Art History and another discipline. In such cases, the number of required courses is reduced to 11. Another option is the combined Art History-Studio Art major. Eight Art History courses and three V&PA courses normally serve as the Art History component of a double major or a student-designed major. A combined major, requiring a minimum of eight Art History courses, may be developed in consultation with the Studio Art and Art History program advisors.

1. Art History Courses

- a. 010: From the Stone Age to Our Age (or equivalent course or superior advanced placement performance)
- b. 151: Methodology and Historiography
- c. Six courses, of which four must include each of the following areas: Ancient, Renaissance/Baroque, Non-Western, Modern. No more than two courses may be in any one area, and three must be at the 200 level.

2. Related Courses

Three courses in V&PA, of which one must be in Studio Art. These courses must be selected in consultation with the advisor.

Honors in Art History

Requires the 14 courses for the art history major, including a directed reading (299, section 1) in the Fall of the Senior Year and the senior honors thesis (299, section 8) in the Spring. Students wishing to take Honors in Art History should identify an area of interest, choose an appropriate advisor, and apply for eligibility to the Art History faculty before the end of the junior year. See the course description under Art 299, section 8, Honors in Art History, for details.

Nonmajors

All courses and seminars in this program are open to nonmajors. Students whose major lies in another discipline may minor in art history. Six courses are required for the art history minor.

The Art History Minor

Requirements:

1. 010: From the Stone Age to Our Age
2. Five additional courses, with no more than three in one area of specialization (i.e., Ancient, Renaissance/Baroque, Modern) and at least two at the 200 level.

Courses

010 FROM THE STONE AGE TO OUR AGE: MONUMENTS AND MASTERPIECES OF WESTERN ART/LECTURE, DISCUSSION

Begins with a reach back in time to the dawn of history 20,000 years ago when the earliest creators in the western world painted powerful images of animals on walls located in the eerie, dank depths of cave interiors. This startling act marked the beginning of communication through visual images. We will move chronologically through history, exploring the major monuments and masterpieces of painting, sculpture, and architecture and the cultures which produced them. By focusing primarily, although not exclusively, on select key monuments—the Pyramids, the Parthenon, the Pantheon—and on the masterpieces of major artists—Raphael, Rembrandt, Renoir, Rothko (among others)—from prehistoric times to our own computer age, we will gain an understanding of visual culture and of the needs and aspirations that are expressed. Staff/Offered every semester

105 THE AEGEAN WORLD/LECTURE, DISCUSSION

An introduction to the architecture, sculpture, and painting of Egypt and the Aegean during the Bronze Age. The course covers the Old and New Kingdoms of Egypt; and the cultures of the Aegean islands, Crete, and mainland Greece. Examines artistic forms and traditions of each region in order to shed light on the individual religious and social contexts in which they evolved. Highlights the archaeologists whose discoveries have illuminated the history and artifacts of these lands. Field trips to area museums. Mr. Townsend/Offered every other year

106 INTRODUCTION TO ARCHAEOLOGY/LECTURE, DISCUSSION

Concentrates on the Mediterranean region, tracing the history and methods of archaeology—emphasizing its unique combination of the sciences and the humanities—from its first steps to its technologically advanced state today. Selected case studies will demonstrate how archaeology has illuminated the ancient world. Also examines the newly developed field of underwater archaeology.

Mr. Townsend/Offered every other year

109 CLASSICAL MYTH AND THE GREEK IDEAL IN ART/LECTURE, DISCUSSION

Investigates selected classical myths and the concept of the “Greek ideal” as expressed in art, both in classical Greece and Rome and in various later periods, including the 20th century. Approaches the myths from the standpoint of origin and significance, changing modes of representation, and manipulation for political purposes. The “Greek ideal” is also examined both as it originally developed and as it was conceived in subsequent ages. The course also considers the changing attitudes towards the classical world and the significance of the classical tradition in art and history. Field trips to area museums. Mr. Townsend/Offered every other year

110 ANCIENT GREEK ART/LECTURE, DISCUSSION

This intensive survey reviews Greek art from the collapse of the Minoan-Mycenaean world in the 12th century B.C. to the close of the Hellenistic period in the first century B.C. Geographically, it reaches from Greece itself, westward to the Greek cities of South Italy and Sicily, and eastward to the Hellenized lands of Asia Minor, Egypt, and the Near East. The course discusses the concept of artistic originality and stylistic development, the relationship between art and politics, and the contribution of Greek art to the history of the visual arts in the Western world. Field trips to the Worcester Art Museum and the Boston Museum of Fine Arts. Mr. Townsend/Offered every other year

111 ROMAN ART AND ARCHITECTURE/LECTURE, DISCUSSION

See Ancient Civilizations 111. Staff/Offered every other year

114 ANCIENT CITIES AND SANCTUARIES/LECTURE, DISCUSSION

Introduces the great urban and religious centers of the ancient world. The course examines the concept of the city as it first evolved in the Near East and as it developed in classical Greece and Rome. The course emphasizes both the design and structure of urban spaces and the factors affecting town planning. Discusses ancient sanctuaries not only as areas of religious worship, but also as centers of cultural activity involving theater, art, athletics, and politics. Cities and sanctuaries are viewed in their historical setting as part of the larger civilizations which nurtured them. Mr. Townsend/Offered every other year

124 ITALIAN ART FROM GIOTTO TO BOTTICELLI/LECTURE, DISCUSSION

Examines one of the most crucial periods in Western art, the Early Renaissance in Italy. Investigates painting, sculpture, and architecture in their cultural and historical contexts from the trecento (1300s) to the late quattrocento (1400s), with a focus on Tuscany and its flourishing capital, Florence. Explores the movement away from Byzantine and Gothic art toward a new, uniquely Italian style emphasizing humanity, realism, and science. Assesses how humanist studies, republican politics, monastic reform, and the emergence of a wealthy mercantile class affected artistic style and theory. Considers artists' growing self-awareness as professionals contributing to contemporary intellectual developments and the ideology of genius. Artists highlighted in this course include Giotto, Brunelleschi, Donatello, Ghiberti, Fra Angelico, Piero della Francesca, and Botticelli. Field trips to area museums.

Mr. Bailey/Offered every other year

125 ART IN THE AGE OF MICHELANGELO/ LECTURE, DISCUSSION

Focuses on the art of the 1500s in Italy, an era comprising the High Renaissance and Mannerism, perhaps the single most influential period in Western art after classical times. Investigates painting, sculpture, and architecture in the major Italian cultural centers of Florence, Rome, Milan, Parma, Mantua, and Venice. Considers questions of style, influence, patronage, art theory, and scholarly and religious developments. Highlights the work of Michelangelo, including the recently restored Sistine Chapel frescoes, the Medici Tombs, the *David* and the *Pietà*. Also considers the work of Leonardo da Vinci, Raphael, Correggio, Giorgione, and Titian, and their relationship to Michelangelo and his legacy. Looks at the rise of papal Rome and the building of St. Peter's basilica and the Vatican palaces. Mr. Bailey/ Offered every other year

131 BAROQUE ART IN THE AGE OF BERNINI/LECTURE, DISCUSSION

Considers Italian art and architecture from around 1580 to 1680, the age known as the Baroque. An era of astonishing artistic activity, it was marked by lavish patronage by popes, cardinals, and princes, centering on the cosmopolitan capital of Rome. This period was characterized by fundamental changes in society, including the birth of the Catholic church as a concept, new and revolutionary scientific discoveries, a new global awareness, and the growth of political absolutism. Explores how these developments informed the style, iconography, and patronage of art. Highlights Italian artists Caravaggio, Bernini, Borromini, and Pietro da Cortona, as well as foreigners working in Italy such as Poussin and Claude Lorrain. Topics considered include the rise of landscape painting, still life, and genre painting, as well as the concept of the Baroque unity of the arts. Field trips to area museums. Mr. Bailey/Offered every other year

140 MODERN ART: 19TH CENTURY/LECTURE, DISCUSSION

Examines neoclassicism, romanticism, realism, and impressionism. Studies the development of landscape painting in England and France, in relation to the rise of urbanization and industrialization, and the origins of an "avant-garde." Ms. Grad/Offered every other year

141 IMPRESSIONISM/LECTURE, DISCUSSION

Traces the development of impressionism over three decades: from the early works of Manet to the last Impressionist Exhibition in 1886. We examine in great depth both the stylistic development of individual artists—Manet, Monet, Renoir, Degas, Cezanne, Cassatt, and Morisot—and the intense cross-fertilization of ideas between and amongst these artists. In addition, the course examines the academic paintings of the Jonas and Susan Clark Collection to illustrate what kind of art the impressionists were reacting against as well as the very art that was popular when impressionism failed to win critical acceptance. Ms. Grad/Offered every other year

142 MODERNISM/LECTURE, DISCUSSION

Begins in 1886, the year in which the 20th century arrived. After a brief survey of post impressionism, we trace the blossoming of the modern imagination in Fauvism, Cubism, German expressionism, Dadaism, and surrealism. Ms. Grad/Offered every other year

143 ART FROM 1945 TO 1965/LECTURE, DISCUSSION

Surveys the major movements of contemporary American and European art, including abstract expressionism, pop art, and earth art. Explores the increasing importance of the commercial environment, popular culture, and technology in the art of the sixties. Ms. Grad/Offered every other year

147 ART CRITICISM/LECTURE, DISCUSSION

Surveys the writings of selected American and English art critics active from 1945 to the present. Students become familiar with a variety of methodologies, including formalism,

Marxism, and feminism. Critics include Clement Greenberg, Hilton Kramer, Lucy Lippard, T.J. Clark, and John Berger. Readings vary from year to year. Several field trips to Boston area galleries and museums. Writing intensive. 143, Art 1945 to 1965, is recommended but not required. Ms. Grad/Offered every other year

148 LANDSCAPE AS REVELATION: THE ART OF GEORGIA O'KEEFFE/LECTURE, DISCUSSION

Examines broad cultural and geographic issues by focusing on the work of Georgia O'Keeffe. Like many 20th-century modernists, she shunned the technological urban world to search for primordial landscapes. From her experiences of the southwestern desert, her readings of Thoreau, and her study of Eastern religions, she forged a spiritual art with moral import. Readings include Thoreau, Emerson, Paul Tillich, Mabel Dodge Luhan, and Mircea Eliade. Ms. Grad/Offered every other year

151 METHODOLOGY AND HISTORIOGRAPHY/LECTURE, DISCUSSION

This course is designed as an introduction to the various interpretative strategies used in the analysis of visual imagery, as well as to the principles underlying the construction of art history as a discipline. Over the course of the semester, we will examine in detail methodological approaches such as formalism, iconography, Marxism, feminism, psychoanalysis, and semiotics, not only in theory, but also in practice. We will also analyze the ways in which art history and aesthetics have been reconfigured and reformulated since its beginnings, in part under the impact of such methodologies. Ms. Kjellman/Offered every year

155 ART OF AFRICA, OCEANIA, AND SOUTHWESTERN NATIVE AMERICA/LECTURE, DISCUSSION

Focuses on the art of the Yoruba of Southwestern Nigeria, the Northwest Coast Native Americans, and New Guinea, and considers the art forms, cultural settings, and distinctive aesthetic in non-western culture. Students will be expected to make aesthetic and stylistic judgments concerning selected original material. Ms. Borgatti/Offered every third term

156 ARTS OF BLACK AFRICA/LECTURE, DISCUSSION

Introduces art in the Western Sudan and Guinea Coast, the Niger Delta and Equatorial Forest, the Southern Savanna, and southern and east African fringe. Emphasizes formal, conceptual, and historical links between the cultures and art forms. Ms. Borgatti/Offered every third term

157 THE ARTS OF NORTH AMERICAN NATIVE PEOPLES/LECTURE, DISCUSSION

Examines the arts of the native peoples of North America, i.e., the arts of Woodland, Southeastern U.S., Plains, Pueblo, Navajo, California, and Northwest Coast Indian groups as well as that of Alaskan and Canadian Eskimos. Studies the traditions from the contact period (1500-1900), and pre-contact traditions known from the archaeological record. Ms. Borgatti/Offered every third term

159 LATIN-AMERICAN ART/LECTURE, DISCUSSION

Surveys the art and architecture of Latin America, ranging from Argentina to the U.S., from the pre-Columbian period to the present. Begins with an exploration of the art of Mesoamerica and the Andes before the arrival of the Europeans, including the Maya, Olmecs, Aztecs, and Inca. Explores the cultural convergence that resulted from the conquest in the 16th century, focusing on the role of Amerindian artists and traditions in the formation of early Colonial culture. Traces the development of the colonial arts, considering the role of civil and religious patronage, the rise of the art guilds, the international makeup of European cultures in the Americas, and the relationship with the arts of Spain and Portugal. Considers the rise of nationalism in the 17th and 18th centuries and its effect on the arts, including the revival of Amerindian forms by the independence movement in regions that would later become Peru and Mexico. Explores the development of the arts from independence from Spain and Portugal in the early 19th century to the present, including a consideration of Chicano art in the United States. Field trips to area museums. Mr. Bailey/Offered every other year

160 THE ARTS OF ASIA/LECTURE, DISCUSSION

The 21st century has been called the “Asian Century” in anticipation of the leading role that Asia will play in the world’s economic, political, and cultural life. This course journeys through the history of the art and architecture of the most important civilizations in the Far East: China, Japan, and Korea. Begins with China, whose arts tradition developed in isolation for over a millennium before exerting a profound influence on the nascent visual arts cultures of Japan and Korea about 2,000 years ago. Explores how those two regions developed unique art forms that were repeatedly still affected by new waves of influence from China. Considers ancient bronzes, scroll and screen painting, religious sculpture, ceramics and decorative arts, and architecture. Examines the function of these arts in society; the relationship between art and the great religions and philosophies of Daoism, Shinto, Confucianism, and Buddhism (especially Chan, or Zen Buddhism); the diversity of art patronage (emperors, warlords, monks, and literati); and the relationship of art to the past. Field trips to area museums. Mr. Bailey/ Offered every other year

161 THE ARTS OF ISLAM/LECTURE, DISCUSSION

Islamic peoples make up one third of the world’s population, historically embracing regions as diverse as Spain, North Africa, the Middle East, India, and Central Asia. Their culture is dynamic and diverse, and intimately related to neighboring civilizations in Europe, the Far East, and Sub-Saharan Africa. Examines the art and architecture of Islam from the lifetime of the Prophet Muhammad (d. 632) to the present. Considers the development of the mosque and madrasa (religious college), miniature and mural painting, ceramics, ivory, metalwork, textiles, and other arts. Explores the religious disinclination toward figural art and the growth of the “arabesque,” or geometrical/floral patterns. Also examines the flourishing figural tradition that existed in non-religious art. Monuments considered include the Alhambra in Granada, the Great

Mosque of Damascus, the Dome of the Rock in Jerusalem, and the Taj Mahal. Field trips to area museums. Mr. Bailey/ Offered every other year

215 THE TEMPLE BUILDERS: ARCHITECTURE IN ANCIENT GREECE/SEMINAR

Traces the evolution of monumental architecture in Greece from its origins in the Geometric period through its development in Archaic, Classical, and Hellenistic times. Emphasizes the integration of craftsmanship, or *techne*, with elements of design in the Doric, Ionic, and Corinthian orders. Discusses the relationship between architect and patron, the social role of architecture, and its political impact, as well as the problems of modern investigation and reconstruction of ancient buildings. Mr. Townsend/ Offered periodically

216 ARCHITECTURE AND DEMOCRACY/SEMINAR

This seminar will explore the relationship between the built environment and civic ideology in ancient Athens and 20th-century America. “Built environment” refers to structures in, through, and around which a society functions and includes both private and public buildings and spaces. “Civic ideology” means ideas that embody the collective beliefs and aspirations of the citizen body. In particular we will be interested in the relationship between the individual citizen and the state in ancient Athens and 20th-century United States and the means by which architecture acts to construct that relationship. Area field trips. Mr. Townsend/ Offered every other year

218 ART IN THE AGE OF ALEXANDER THE GREAT/SEMINAR

By his death in 323 B.C., at age 33, Alexander the Great had conquered most of the known world, his empire stretching from Greece to the Indus River Valley of India. In the process, he transformed this region into a polyglot, multi-cultural mix that has been compared to the global village in which we live today. This course examines the life and times of Alexander and his followers through the record of the material culture they left behind: architecture, sculpture, painting, gold, coins, jewel-

ry, and everyday artifacts. It specifically examines how culture is shaped by such material goods, and uses an historical perspective to gain insight to the ever-changing profile of our society today. Trips to area museums.

Mr. Townsend/Offered every other year

219 SPECIAL TOPICS: ANCIENT ART/SEMINAR

Introduces specific issues and approaches in the study of ancient art. The course develops the student's research, oral presentation, and writing skills through intensive study that is not possible in a survey course. While the seminar is designed for majors, qualified students from other disciplines are welcome. Course may be taken for credit more than once.

Mr. Townsend/Offered periodically

230 CARAVAGGIO/SEMINAR

Focuses on the work of one of the best known artists of any period, the painter Michelangelo Merisi, or Caravaggio (1573-1610). Although he died a young man in 1610, he is often considered the most important painter of the 17th century. Explores Caravaggio's intense naturalism and the controversy it caused, his sense of drama and supernatural light, and the role of his personality in works of art. Surveys his life in Rome, Naples, Malta, and Sicily, considering his religious paintings, genre scenes, and still lifes. Considers the contradictory aspects of his character: his sexual ambivalence, his criminal violence, and his intense spiritual devotion. Explores his artistic legacy in Italy and abroad. Readings include art-historical scholarship, history, and original documents from the period. Field trips to area museums.

Mr. Bailey/ Offered periodically

232 CONVERGING CULTURES IN THE AGE OF DISCOVERY/SEMINAR

A critical assessment of the notion of hybrid art, focusing on the period of European "discovery" of non-European civilizations from the 16th-18th centuries. Explores the impact of European Renaissance and Baroque art in a global context, including the Far East, Southeast Asia, India, and the Americas. This age of global encounter involved intimate con-

tact between the widest spectrum of peoples, representing different races and religions, as well as political, social, economic, and cultural systems. Considers the role of missionaries, merchants, and colonial powers in bringing European art to the non-European world, and the differing degrees of contact/conquest that existed between them. Primary focus is on the reaction of non-European cultures such as the Chinese and Nahua (Aztecs) to the new styles and iconographies from Europe, and the perpetuation of indigenous symbols, styles, and ideas in the art produced after contact with Europeans. Evaluates the new art styles that were developed as the cultures began to merge, and questions whether transcendent styles or aesthetics emerge from the prolonged interaction of cultures. Mr. Bailey/Offered periodically

239 SPECIAL TOPICS: RENAISSANCE AND BAROQUE ART/SEMINAR

Introduces specific problems in Renaissance and Baroque art and focuses on student research, oral presentation, and writing skills. Qualified students from other disciplines are welcome. Mr. Bailey/Offered periodically

247 ART HISTORY AND KITSCH/SEMINAR

This course takes a detailed look at one of the most denigrated aspects of visual production: kitsch. Our investigation will involve both objects designated as kitsch and theoretical writings on kitsch aesthetics and kitsch's relationship to art and the avant-garde, as well as the related issues of originality, authenticity, and reproducibility. Ms. Kjellman/Offered every other year

248 WOMEN AND ART/SEMINAR AND PRACTICUM

Explores the social and cultural construction of femininity (and masculinity) and the ways in which these are expressed in art and popular culture. Ms. Grad/Offered every other year

249 SPECIAL TOPICS: MODERN ART/SEMINAR

Introduces specific topics in the study of modern art. Research and writing intensive. Qualified students from other disciplines are welcome. Ms. Grad/Offered periodically

250 THE JONAS AND SUSAN CLARK COLLECTION/SEMINAR

Upper-level multidisciplinary course which examines in detail the American landscape and European genre paintings of this small and unique collection. Ms. Grad/Offered every other year

265 INDIA UNDER THE GREAT MUGHALS/SEMINAR

Explores one of the most lavish and creative cultural renaissances in world history. Between the 16th and 19th centuries, most of India belonged to the Great Mughals, emperors whose names remain famous throughout the world: including Babur, Akbar, and Shah Jahan. Based in the great cities of Delhi, Agra, and Lahore, the courts of the Mughal emperors were the most cosmopolitan on earth, embracing Europeans, Chinese, Persians, Hindus, and others. Their arts were similarly diverse, ranging from exquisite jewelry in jade, crystal, ivory, and precious stones to brilliant miniature paintings of the emperors' exploits and some of the greatest architecture to survive from any culture—palaces, gardens, and mosques. Monuments considered include the great forts of Delhi, Agra, and Lahore, the lost palace of Fatehpur Sikri, and the Taj Mahal. Field trips to area museums. Mr. Bailey/Offered periodically

290 ART, HISTORY, AND CULTURE/CAPSTONE

Designed as a capstone experience and required of all majors, the course discusses theory and method in art history, both past and present, and addresses the relationship between the study and criticism of art and the cultural forces affecting its creation. Staff/Offered every other year

Special Offerings

299 SEC. 1 DIRECTED READING

Staff

299 SEC. 2 DIRECTED RESEARCH

Staff

299 SEC. 3 DIRECTED WRITING

Staff

299 SEC. 4 FIELD PROJECT

Staff

299 SEC. 5 SPECIAL PROJECT

Staff

299 SEC. 6 SPECIAL TOPICS

Staff

299 SEC. 8 HONORS IN ART HISTORY: SENIOR YEAR

Qualified students who take honors in Art History should identify an area of interest, select an appropriate advisor, and apply for eligibility to the Art History faculty before the end of the junior year. The honors thesis is a year-long project, for which the student will take 299.1, Directed Reading or 299.2, Directed Research, in the fall of the senior year and 299.8, Honors in Art History, in the spring semester. A second reader, chosen by the student and the advisor, will participate in the final evaluation. Credit is given for course work completed, even if a student is not recommended for honors. Staff/Offered every year

299 SEC. 9 INTERNSHIP

Staff

STUDIO ART

Program Faculty

Sarah Buie, M.F.A., *program director: graphic design, museum design and interpretation*
Elli Crocker, M.F.A.: *drawing, painting*
Sarah Walker, M.F.A.: *foundation studies, drawing, painting*

Part-Time Faculty

Valerie Claff, M.F.A.: *foundation studies*
Stephen DiRado, B.F.A.: *photography*
Jennifer Hilton, M.F.A.: *printmaking*
Ron Rosenstock, M.A.: *photography*
Fred Simon, B.S.: *video production*
Ann Tracy, M.F.A.: *sculpture*
Cynthia Wilson, B.F.A.: *graphic design*

Emeritus

Donald W. Krueger, M.F.A.: *foundation studies, drawing, painting, illustration*

Undergraduate Program

This major is designed to meet a number of student needs and interests: preprofessional preparation for graduate study and/or a career in art, design, art education, arts management, art therapy, or other arts-related fields; the satisfaction of personal interest in art and design; significant involvement in the creative process; and a meaningful focus of liberal education.

The studio art major affords a high degree of flexibility in developing a program suited to individual needs and changing interests. A strong advising program assists students in curriculum planning, identifying areas of major interest, and preparing for graduate study or a career. Areas of specialization include drawing and painting, photography, graphic design, printmaking, sculpture and three-dimensional design, and video production.

In addition to course offerings, there are also exhibitions of the work of contemporary artists, course-related exhibitions, and exhibitions of senior thesis work in the University Gallery; field trips to galleries and museums as part of several studio courses; and, in the University Center's Craft Studio, opportunities for extracurricular involvement in arts and crafts activities.

The Studio Art Major

The major normally consists of 14 courses: 11 studio courses and three art history courses. The foundation courses—100 and 102—are required of majors. The foundation art history course (ARTH 10) must be one of the three art history courses. The studio courses, with approval of the program advisor, may include studios in music, theater arts, screen studies, and cartography as well as student-initiated non-traditional experiences. One interdisciplinary course in the program or the V&PA department is also required of majors. In certain circumstances, fewer studio art courses—but no less than eight—fulfill the major. Admission to the studio art major is selective, and students must maintain an above-average academic record.

Honors in Studio Art

Students with a strong interest in art and design, a commitment to intensive study, and who have at least a B average may, with department approval, elect the honors sequence: a two-semester, two-credit senior thesis. Students are expected to use the thesis to develop a body of preprofessional studio work in preparation for graduate study or a career in the arts. The thesis must be done as a senior, and will be reviewed by a faculty panel, with selected works from the thesis exhibited at the end of the year. Credit is given for course work completed, even if a student is not recommended for honors.

Combined and Double Majors

Eight studio courses and two art history courses normally serve as the studio art component of a double major or a student-designed major. A combined studio art-art history major, requiring a minimum of eight studio courses, may be developed in consultation with the studio art and art history program advisors.

Nonmajors

Studio art courses are open to all students, majors and non-majors alike; certain studio courses satisfy the University's aesthetic perspective requirement. Those students interested in studio art but majoring in other disciplines may develop a complementary four- or five- course sequence in any of the fields of study within the program, such as graphic design or photography, among others.

Courses

100 and 102 are “studio perspectives” designed to introduce students to the nature of visual language and the process of creative thought and action and to encourage the development of visual communication and expression skills. Although as a rule not prerequisites for other studio courses, these studio perspectives are required for majors and strongly recommended for non-majors as an introduction to and preparation for additional work in studio art.

100 VISUAL STUDIES: 2D DESIGN AND COLOR/STUDIO, LECTURE, DISCUSSION

Considers visual perception and visual problem-solving/figure field relationships, two-dimensional pattern and form, and theory and dynamics of color. Open to nonmajors. Each semester, section one (*Basic Design*) will be a project-based class exploring design elements and principles. Section two (*Pathway of the Senses*) will emphasize a more intuitive and sensory approach to design basics, exploring sound, poetry, landscape and memory as inspiration. (AP) Ms. Claff/Offered every year

102 VISUAL STUDIES: DRAWING/STRUCTURE AND PROCESS/STUDIO, LECTURE, DISCUSSION

Addresses the mechanics and expressive potential of drawing. Traditional illusionistic drawing techniques will be combined with exercises which facilitate personal expression and subjective response. In exploring the relationship between seeing, thinking, and making, the beginning student will acquire fundamental skills in image-making and insight into the creative process in general. (AP) Staff/Offered every year

107 INTRODUCTION TO VIDEO PRODUCTION/STUDIO, LECTURE, DISCUSSION

Workshop in seeing and thinking in electronic imaging techniques and processes. Open to nonmajors. Mr. Simon/Offered every semester

120 INTRODUCTION TO PHOTOGRAPHY: THE ZONE SYSTEM/STUDIO, LECTURE, DISCUSSION

Introduction to black-and-white photography emphasizing the zone system and including camera operation, developing, printing, and finishing techniques. Students must have a variable setting 35 mm camera with a built-in or hand-held exposure meter, and must provide their own film and paper. Open to nonmajors. Prerequisite: instructor permission. Mr. DiRado, Mr. Rosenstock, Staff/Offered every semester

121 INTERMEDIATE PHOTOGRAPHY/STUDIO, LECTURE, DISCUSSION

Continues the refinement of photographic seeing and darkroom techniques. Considers contemporary modes of photography and emphasizes development of personal vision. The

course will be offered with two thematic emphases. *Passion for Seeing Things, Fast and Slow* (with Stephen DiRado) will explore issues of time and the camera's interpretation of it. *Light as Subject Matter* (with Ron Rosenstock) will focus on the language of light within photography. Open to nonmajors. Prerequisite: 120 or acceptable portfolio, and instructor permission. Mr. DiRado, Mr. Rosenstock, Staff/Offered every year

124 INTRODUCTION TO GRAPHIC DESIGN/STUDIO, LECTURE, DISCUSSION

Introduction to the language, process, and potential of graphic design as communication. Exercises and applied problems emphasize the relationship between form and meaning, typography, image-making, and conceptual development. An introduction to basic design tools, including the computer. Ms. Buie and Ms. Wilson/Offered every year

125 GRAPHIC DESIGN PROJECTS/STUDIO, LECTURE, DISCUSSION

Intermediate-level projects in graphic design, with reference to particular design media such as books, identity, maps, exhibit design, web sites, etc. Emphasis on exploring conceptual development and the problem-solving process. (Knowledge of Mac-based page layout programs is helpful, but not required.) Prerequisite 124 or permission of the instructor. Ms. Wilson/Offered every year

128 BODY: PAINT, PENCIL, AND CAMERA/STUDIO, LECTURE, DISCUSSION

Taught concurrently with Photography 121. Employing various media in this collaboratively taught course, students will focus on the human body as the source of their imagery. From inside and outside, through objective observation and subjective experience, as metaphor or icon, this exploration of the human body will be expansive and nontraditional. In regarding the human form, we continue in an ancient process of self-definition and understanding. Both classes will share critiques and lectures, and some collaborative projects between students will be required. Ms. Crocker/Mr. DiRado

129 FIGURE DRAWING/STUDIO, LECTURE, DISCUSSION

Focuses on the human form through various drawing methods, with analysis of the structure and anatomy of the body as well as exploration of the expressive potential and symbolic associations of the human figure. Ms. Crocker

132 BEGINNING PAINTING/STUDIO, LECTURE, DISCUSSION

Introduces the fundamentals of craft and explore the synthetic possibilities of paint, while discussing the conceptual basis for this medium (e.g., "Why paint?"). Focuses on material—both the materials employed by the painter, and the materials the painter simulates. Painting as a vehicle for thinking and communication will be stressed. Prerequisites: 100 and/or 102 or instructor permission. (AP) Ms. Crocker/Ms. Walker

133 INTERMEDIATE PAINTING/STUDIO, LECTURE, DISCUSSION

A continuation of the study of painting with increasing emphasis on individual development and direction. Alternative media, experimental approaches to the depiction of form and space, and non-objective imagery will be introduced. In alternate years, the course will be taught on the theme of *Picturing Psychological Space* (with Sarah Walker), in which students create virtual worlds using adventurous contemporary approaches to challenge and expand the idea of what we consider a painting. Prerequisite: 100 and/or 102, or instructor permission. Ms. Crocker/Ms. Walker

136 INTRODUCTION TO SCULPTURE/STUDIO, LECTURE, DISCUSSION

Introduces the modes of three-dimensional creation through a variety of traditional and contemporary materials and concepts. Alternating emphasis on sculptural objects, the human figure, and issues of architectural/environmental expression. Open to nonmajors. (AP) Ms. Tracy/Offered every year

137 SCULPTURE PROJECTS/STUDIO, LECTURE, DISCUSSION

Intermediate-level course leading to the development of personal direction and expression in

three-dimensional form. Open to nonmajors. Prerequisite: instructor permission. Ms. Tracy/Offered every year

158 INTRODUCTION TO PRINTMAKING/STUDIO, LECTURE, DISCUSSION

Introduces the techniques and aesthetic of intaglio printing—primarily hard and soft ground etching methods, embossment, and aquatint—on metal plates. The course may include methods of engraving, drypoint, and collagraph. Open to nonmajors. (AP)Ms. Hilton/Offered every year

161 PRINTMAKING/MONOTYPE/STUDIO, LECTURE, DISCUSSION

Introduces the techniques and aesthetic of monotype printing. Ms. Hilton/Offered every year

162 EXPLORING THE NATURAL WORLD/DRAWING, PRINTMAKING, AND MIXED MEDIA/ STUDIO, LECTURE, DISCUSSION

Drawing serves as the media of discovery in on-site observations of conditions of light, reflection, water, sky, and landscape, as well as in-depth studies of pattern, texture, and design in flora and fauna. Etching, woodprint, and monoprint serve as mediums of translation and invention. A final book project focuses on environmental themes. Staff/Offered every year

170 STORYTELLING THROUGH VIDEO: DOCUMENTARY AND DRAMATIC PRODUCTION/STUDIO, LECTURE, DISCUSSION

Students in this class will produce one or two "storytelling" videos. Students may work in either the documentary or dramatic genre, and may work individually or collaboratively on each project. All pre-production, production, and post-production work will be done outside of class (including preparation of scripts or treatments, shooting, separate sound or archival recording if necessary, and editing). In addition to production work, students will also keep a journal in which they will record insights they derive from the filmmaking or film viewing related to this course. Prerequisite: 107 or appropriate or instructor permission. Mr. Simon/Offered every year

174 CONTEMPORARY DIRECTIONS/STUDIO, LECTURE, DISCUSSION

Experiential examination of current movements, directions, styles, and attitudes in art. Open to nonmajors. Prerequisite: appropriate introductory course(s) and/or instructor permission. Staff/Offered periodically

182 TECHNICAL THEATER

See Theater Arts 120. Mr. Weinrobe/Offered every year

184 DESIGN FOR PERFORMANCE

See Theater Arts 123. Mr. Weinrobe/Offered every year

200 PHOTOGRAPHY PROJECTS/STUDIO, LECTURE, DISCUSSION

Continues the study of the techniques and aesthetics of black-and-white photography. Students have the opportunity to pursue individual photographic projects in the size and format of their choice. Open to nonmajors. Prerequisite: 120 and/or 121 and instructor permission. Mr. DiRado, Mr. Rosenstock, Staff/Offered every year

204 SACRED SPACE/LECTURE, DISCUSSION, PROJECTS

Explores traditional and contemporary experiences of the sacred in spatial terms—through study of spatial and natural archetypes (i.e., mandala, threshold, cave, mountain); of geometric harmonies in nature, art, and architecture; of sacred and secular architectural forms (temple, stupa, shrine, indigenous village architecture); of geomancy or the relationship between built and natural environments; and of ancient and contemporary expressions of the natural world as Gaia, manitou, or sacred geography. Permission of instructor required. Ms. Buie/Offered every year

205 EROS AND THANATOS/SEMINAR, DISCUSSION, PROJECTS

An interdisciplinary seminar exploring the nature of the life-energy we call eros, and its relationship to thanatos, or death, with an emphasis on deepening our understanding of our relationship to the natural world.

Permission of the instructor required. Cross-listed with philosophy. Permission required. Ms. Buie and Mr. Wright/Offered in alternate years

208 TYPOGRAPHY/STUDIO, LECTURE, DISCUSSION

Study of the informational and expressive dimensions of typographical language. The history and technology of type is considered, with an opportunity to handset metal type as well as do extensive work on the computer. Applications to a variety of problems, including letterhead, poster, and publication design. Prerequisites 124 and/or 125, or permission of instructor. Ms. Buie/Offered every year

209 INTRODUCTION IN INTERACTIVE DESIGN

Explores the basic principles of interactive design and development for the computer screen and the Web in general, through lectures, critiques, workshops and assignments. Staff/Offered every year

234 STUDIO TOPICS/STUDIO, LECTURE, DISCUSSION

Preparation for the senior thesis undertaken in the spring semester, but may be taken by other interested advanced-level studio art students in various concentrations, as well as non-studio students in other creative fields (such as music, writing, or theater). This interdisciplinary course is structured as a seminar and requires extensive student participation in discussions, as well as independent creative work in a chosen medium. Topics will revolve around both timeless and highly contemporary issues confronting the artist in the making of his/her work. Will involve readings and some writing. Prerequisite: instructor permission. Ms. Crocker, Ms. Walker/Offered every year

250 PHOTOGRAPHY STUDIO/STUDIO, DISCUSSION

Advanced, professionally oriented, individual photographic study. May be taken for credit more than once. Prerequisite: appropriate intermediate and advanced photography courses and instructor permission. Mr. DiRado, Mr. Rosenstock, Staff/Offered every year

254 GRAPHIC DESIGN STUDIO/STUDIO, LECTURE, DISCUSSION

Advanced applied problems involving the role of designers in professional practice, working with clients and organizations. Consideration of the role of and opportunities for design in meeting communication needs. Prerequisites: 124 and/or 125, or permission of the instructor. Ms. Buie/Offered every year

258 ADVANCED STUDIO/CAPSTONE/STUDIO, DISCUSSION

Refines technical ability in a chosen medium, sharpens critical thinking abilities, and develops a personal iconography. Independent work and thematic progression is encouraged. May be taken for credit more than once.

Prerequisite: appropriate beginning/intermediate courses or instructor permission.

Ms. Crocker, Ms. Walker

266 SCULPTURE STUDIO/STUDIO, DISCUSSION

Professionally oriented, individual study of sculpture, and spatial and three-dimensional design. May be taken for credit more than once. Prerequisite: appropriate sculpture experience and instructor permission. Staff/ Offered periodically

270 PRINTMAKING STUDIO/STUDIO, DISCUSSION

Professionally oriented, individual study in printmaking. May be taken for credit more than once. Prerequisite: appropriate printmaking experience and instructor permission.

Staff/Offered every year

278 VIDEO PRODUCTION STUDIO/STUDIO, DISCUSSION

Advanced projects in video production. May be taken for credit more than once.

Prerequisite: appropriate intermediate-level video production courses and instructor permission. Mr. Simon/Offered every year

280 SENIOR STUDIO/STUDIO, DISCUSSION

Advanced, preprofessional, independent work under faculty supervision, in one of the studio media. May be taken for credit more than once. Prerequisite: appropriate advanced courses and program director permission.

Staff/Offered every year

289 SENIOR THESIS

Honors program for studio art majors in any concentration. Working independently, but in close consultation of the instructor and interaction with the class peer group, the student will prepare a cohesive and mature body of work to be presented in a group exhibition in the University Gallery and to a faculty committee with oral and written support. This work should demonstrate original thinking and a high level of technical mastery. Prerequisite: 234 or instructor permission. Ms. Crocker, Ms. Walker/Offered every year

Special Offerings**299 SEC. 4 FIELD PROJECT**

Staff

299 SEC. 5 SPECIAL PROJECT

Staff

299 SEC. 6 SPECIAL TOPICS

Staff

299 SEC. 9 INTERNSHIP

Staff

MUSIC**Program Faculty**

Benjamin Korstvedt, Ph.D.: *musicology, medieval through 19th-century music and Bruckner*

Matthew Malsky, Ph.D.: *composition, music theory and analysis, history and practice of music technology and hypermedia systems*

John McGinn, DMA: *theory, composition and performance*

Part-Time Faculty

James Allard: *saxophone*

Donald Boothman, B.A.: *voice*

Richard Cain, M.Mus.: *string bass*

Andrew Clark, M.Mus.: *director of choral activities*

Peter Clemente, M.Mus.: *classical guitar*

Maria Ferrante, B.A.: *voice*

James Fidlon, M.Mus.: *director of jazz studies, jazz studies, jazz guitar*

Peggy Friedland, M.Mus.: *flute, ensemble*

Malcolm Halliday, M.Mus.: *piano*

Bruce Hopkins, M.Mus.: *trumpet*

Kallin Johnson, M.Mus.: *keyboard skills*

Martin Kelly: *voice*

Boris Kogan, M.Mus.: *cello*

Sima Kustanovich, M.Mus.: *piano, accompanianist, ensemble*

Timothy McCall, B.Mus.: *jazz saxophone*

Richard A. Odgren, B.Mus.: *jazz piano*

Robert Schulz, M.Mus.: *percussion*

Paul Surapine, B.Mus.: *clarinet*

Douglas Weeks, M.Mus.: *trombone, low brass*

Adjunct Faculty

Hartmut Kaiser, Ph.D.: *German romanticism, music, literature, aesthetics*

Emeritus

Gerald Castonguay, Ph.D.: *musicology*

Wesley M. Fuller, M.Mus.: *theory, composition, electronic and computer music*

Undergraduate Program

The program offers both a major and a minor, as well as courses and activities for the nonmajor. Courses are designed to teach students to listen to music intelligently, to develop musical perception, to master basic skills of music and apply them creatively, and to acquaint students with representative works from various periods of music history. The study of music can open new perspectives on many aspects of culture and society and the program stresses the advantages of combining professional musical development with the humanistic breadth offered by a strong liberal education.

Courses are open to majors and nonmajors, and assignments are designed to suit the different goals and backgrounds of the students in each category.

The Music Major

Fourteen courses are required for the music major:

Requirements:

1. Theory: 121, 122, 223, 224 (includes aural/keyboard skills labs)
2. Music History: 101, 102, 103
3. Private Study: 180 (Two semesters—one unit each—of private instruction taken after completion of Music 121)
4. Performing Groups: a minimum of four semesters in 170, 171, 172, 173, or 174.
5. One seminar at the 200 level, either in history or in theory/composition.
6. Two music electives, selected from computer music, world music, history, and theory seminars, or two additional semesters of 180. Students may also fulfill this requirement through tutorials, directed readings, or special projects. For the non-honors major, the second elective—taken during the senior year—is a capstone project fulfilled by taking 299 Directed Reading, 299 Special Project, or a second seminar at the 200 level.
7. Related areas: two courses, one within visual and performing arts in art history, studio art, theater arts, or screen studies; and one outside visual and performing arts in areas that relate to the major. For example, a major in the music history track focusing on French music of the late 19th and early 20th centuries could select a course dealing with the French language, French literature, European history, or cultural theory.
8. Successful completion of skills labs (Aural Skills I & II, Keyboard Skills I & II), which are taken concurrently with theory and performance classes.

The four semesters (two required, two optional) of private lesson fees for the major are covered by regular tuition payment.

Honors

Admission to the Honors Program is by approval of the music faculty. Students may elect to pursue one of five different honors tracks: history, theory, composition, performance, or music technology. Students apply to the Honors Program in history, theory, composition or music technology at the beginning of

the junior year. Students must apply to the Honors Program in performance at the beginning of the freshman year. Prospective majors who wish to pursue honors in performance must request an audition and assessment of their potential regarding the honors performance track at the end of their first year. Formal admission into the honors performance track begins at the start of the sophomore year.

Honors in History, Theory, Composition, or Music Technology

The 14 courses required for the music major, plus a project (a total of 15 courses) are required. The honors student will replace the two music electives of the music major (item six of the requirements) with study in a special area through either seminars or directed studies. These two special electives lead into the capstone project for the Honors Program (Music 299), where the student will develop a thesis in history or theory, an extended composition, or applications in music and technology.

Honors in Performance

The 14 courses required for the music major, plus two additional semesters of private study, and a senior capstone project culminating in a recital (a total of 17 courses), are required. The honors student will replace the two music electives of the music major (item six of the requirements) with two semesters of private lessons for credit (Music 180). Two semesters of Music 280 (for a total of six semesters of private study) culminate in a full recital and a companion capstone project (Music 290) dealing with the stylistic analysis of the music to be performed in the recital. At least four appearances in student recitals, including a half recital during the junior year, precede the senior recital. The lesson fee in the honors performance track is covered by regular tuition payment during the sophomore through senior years. It is strongly urged that Music 121 and 122 be successfully completed by the end of the first year.

Nonmajors

All of the courses, seminars, and activities in the music program—with the exception of senior tutorials (230, 240, 250, 260)—are open to qualified nonmajors. Students who have a strong interest in music but whose major lies in another discipline can declare a minor in music. The music minor centers on a core of studies in one of five specific areas.

The Minor in Music

Requirements:

1. Music 10 Introduction to Music
2. Music 110 Rudiments of Music (or Music 121, Theory I)
3. One course from the 100-level history or theory courses that would link to work in student's specific area of specialization (e.g., Music 103 Twentieth Century, for the minor in Music Technology)
4. Three additional courses in one of five specific areas of music:

a. Minor in Performance

Three semesters of Music 180. (For information on tuition coverage, see Music 180). Students wishing to specialize in performance should arrange for an audition by contacting the program director. Audition will determine acceptance into the minor.

b. Minor in Music Technology

Music 140 Computer Music
Music 142 Interactive Music,
Programming Composition
Studio/Seminar
Music 270 Directed Studies in Computer Music

c. Minor in Jazz Studies (offered through the Worcester Consortium)

Music 150 Jazz Theory
Music 151 Jazz History
Music 250 Tutorial in Jazz Composition

d. Minor in Music History

Any three of the following music history courses and/or 200 level music history seminars:
Music 101 Medieval, Renaissance, Baroque

Music 102 Classical and Romantic Periods

Music 103 Twentieth Century

Music 210 History Seminar

e. Minor in Music Theory

Music 121 Theory I: Tonality 1
and any two of the following:

Music 122 Theory II: Tonality 2

Music 223 Theory III: Counterpoint

Music 224 Theory IV: 20th Century Practice

Performing Organizations

Nonmajors and majors may audition for a variety of organizations which rehearse regularly and perform several yearly concerts. These groups include the Clark Concert Choir and Chamber Chorus, Instrumental Chamber Ensembles, Clark Concert Band, and the Jazz Workshop Ensembles.

Private Lessons

Private lessons for nonmajors and majors are offered with or without course credit in several areas. See Music 180, Private Instruction for Instruments and Voice (for credit for majors and minors) and Music 18, Private Instruction for Instruments and Voice (non-credit).

Preprofessional Programs

Students interested in such professions as music therapy, multimedia, concert management, ethnomusicology, or music education may combine music courses with appropriate courses from other disciplines to create an individually-designed major. The requirements for such preprofessional programs are jointly determined by the student and an advisory committee made up of one music faculty member and two faculty members from other disciplines.

Although the music program does not offer specific courses in music education, music majors interested in music education may take courses in the music curriculum, in conjunction with teaching courses through the education department. For more information, contact the education department.

Introductory Courses

010 INTRODUCTION TO MUSIC/LECTURE, DISCUSSION

Designed for the nonmajor, the course expands the concept of the musical experience and develops discriminating listeners. The course includes an introduction to principles of rhythm, pitch, timbre (and their notations); the principles of structure; the aesthetics of music; specific forms including fugue, sonata form, variations; and selected historical styles. Staff/Offered every semester

011 MUSIC AS CULTURE/LECTURE, SEMINAR

Students study and listen to the differences and likenesses in music from a wide variety of cultures and consider the ways in which music, ranging from classical art music to music for work and communal celebration, functions within a selected group of world cultures. Includes guest performers of ethnic music. Staff/Offered every year.

012 POP MUSIC IN THE USA/LECTURE, DISCUSSION

Beginning with what is (arguably) the start of the popular in American music, this course will examine Tin Pan Alley, Blues, Country, R&B, Swing, early Rock 'n Roll, Motown, the Folk Revival, the British Invasion, Psychedelic Rock, Progressive Rock, Punk, Disco, Heavy Metal, as well as some more recent music. The course will focus on understanding the stylistic and historical practices of this wide range of popular music. The principle perspective of the class will address popular music as an audible text as an artifact of—and contributor to—popular music culture. No previous musical experience (such as the ability to read or play music) is assumed. However, a willingness to listen to all of this music carefully, and to engage a variety of theoretical approaches is presumed. Mr. Malsky/Offered periodically

110 RUDIMENTS OF MUSIC/LECTURE, TUTORIAL, LAB

Fundamentals of music requiring no previous musical training. Students learn to understand, hear, and write the basic elements of the pitch and rhythmic notation system. Skills gained

enable students to pursue private instrumental or vocal instruction, and to begin work in composing. Mr. McGinn, Mr. Malsky/Offered every year

Music History Courses

101 MEDIEVAL, RENAISSANCE, BAROQUE/LECTURE, DISCUSSION

Survey that ranges from early Christian chant, the medieval song, and the motet to the music of Renaissance and Baroque genres focusing on the major composers of the periods.

Mr. Korstvedt/Offered every year

102 CLASSICAL AND ROMANTIC PERIODS/LECTURE, DISCUSSION

Survey beginning with the music of 18th-century Vienna and focuses on the music of Haydn, Mozart and Beethoven and major figures of 19th-century romanticism.

Mr. Korstvedt/Offered every year

103 TWENTIETH CENTURY/LECTURE, DISCUSSION

Explores the abandonment of functional tonality after 1900 and its replacement with new musical systems, and the remarkable rejections and explorations which characterize the musical world after 1945. Studies the varied styles and the spirit of experimentation that is particularly characteristic of the second half of the century is an important focus of the course.

Staff, Mr. Malsky, Mr. McGinn/Offered every year

210 HISTORY SEMINAR

For the advanced music student, rotating topics that include: Fin-de-Siecle Paris; Beethoven: The Man and His Music; Amadeus: The Life and Music of Mozart; French Impressionism; Wagner, the Jews, and the Nazis. Prerequisites: 101 and 102 or instructor permission. Mr. Korstvedt/Offered every year

230 SENIOR TUTORIAL IN MUSIC HISTORY

Develops work (e.g., a paper, composition, or performance) in consultation with the instructor. For majors only. Prerequisite: instructor permission. Staff/Offered every semester

With program director permission, the following courses offered by other departments may be taken for music history, criticism and theory credit.

GERMAN 168 MUSIC IN GERMAN LITERATURE AND THOUGHT

See Foreign Languages and Literatures.

Music Theory Courses

121 THEORY I: TONALITY 1/LECTURE, TUTORIAL, LAB

Explores the system of tonal music commonly employed by composers of the 18th and early 19th centuries, as well as by composers of popular music today. This study, incorporating exercises, composition, analysis, and performance, also examines the way students listen to music in general, thus leading to a deeper understanding of the musical process.

Mr. McGinn, Mr. Malsky/Offered every year

122 THEORY II: TONALITY 2/LECTURE, TUTORIAL, LAB

Deals with problems in analysis, composition, and orchestration in the chromatic style of the 19th century. Uses and analyzes the works of Beethoven, Chopin, Schumann, Wagner, and Brahms as compositional models. Prerequisite: 121. Mr. McGinn, Mr. Malsky/ Offered every year

223 THEORY III: COUNTERPOINT/LECTURE, TUTORIAL, LAB

For the advanced music student, studies the styles and procedures used by composers throughout the development of western art music as models for independent creative work. While emphasizing counterpoint as a procedure, students are expected to have a good background knowledge of music theory and history. Prerequisites: 121, 122 . Mr. McGinn, Mr. Malsky/Offered every year

224 THEORY IV: 20TH CENTURY PRACTICE/LECTURE, TUTORIAL

Analyzes compositional techniques of major 20th century composers and uses them as a basis for composition and analysis assignments. Prerequisite: 222 or instructor permission. Mr. Malsky, Mr. McGinn/Offered every year

140 COMPUTER MUSIC STUDIO/LECTURE, DISCUSSION

The computer is, arguably, the most distinctively contemporary musical instrument. A project-based and historically grounded introduction to the computer as a musical tool, this course covers a variety of technical topics such as multi-track digital recording and mixing, the fundamentals of sound synthesis, and digital signal processing. A series of cumulative technical assignments through the semester lead to a large composition project. A variety of musical repertoires will be studied through recordings and readings. Permission of instructor required. Mr. Malsky/Offered every year

142 INTERACTIVE MUSIC PROGRAMMING & COMPOSITION STUDIO/SEMINAR

Interactive music refers to a composition or improvisation in which software interprets live performances to produce music generated or modified by computers. This course will present both musical concepts and programming techniques for students to produce performable music compositions. Topics will include advanced digital sound synthesis, signal processing, and interactive MIDI applications. Prerequisite: MUSIC 140 or permission of instructor Mr. Malsky/Offered every year

150 JAZZ THEORY/LECTURE, TUTORIAL

Includes a study of the rhythmic/harmonic/melodic structures of jazz, the scalar basis of improvisation, and voicing practice as it pertains to scoring for small and large ensembles. Prerequisite: 110 or passing of placement examination in rudiments. Mr. Fidlon/Offered periodically by permission

151 JAZZ HISTORY/LECTURE, TUTORIAL

Studies the evolution of jazz style from its 19th century beginnings to the present, including: African roots, minstrels, ragtime, Dixieland, swing, bop, progressive, cool, free-form, and third-stream. Requires a research paper and a final exam. Mr. Fidlon/Offered every year

160 SOUNDTRACKS/LECTURE

This class will focus attention on the soundtrack both through hands-on parcticum experience in making soundtracks, and by introduc-

tion students to analytic/interpretive methodologies that highlight music and sound in the cinematic experience. Some introductory experience in either music or screen is required. Additional lab time required for project/studio work, and several evening screenings. Prerequisite: 121 or 140 or Arts 167 or Screen 101. Mr. Malsky/Offered periodically

200 NEW MEDIA THEORY AND PRACTICE STUDIO/SEMINAR

A seminar/production class designed to explore the ideas and techniques surrounding the simultaneous use of multiple digital media to create artistic work for CD-ROM, installation, Internet, and performance. Examines the fields of computer music, hypertext, digital video and computer animation and graphics in order to provide impetus for experimentation with new integrated art-forms. The theoretical writings of Benjamin, Landau, Altman, Negroponte, and others will be the basis for the study of historical, cultural and social contexts. Prerequisites: MUSIC 141, SCREEN 207, STUDIO ART 209 or permission of instructor. Mr. Malsky/Offered periodically

220 THEORY/COMPOSITION SEMINAR

Topics include: Composing the Greek Chorus; Film and Sound; Form and Analysis; Composition. Prerequisites 121, 122, 223, 224. Mr. McGinn, Mr. Malsky/Offered every year

240 SENIOR TUTORIAL IN COMPOSITION

Develops work (e.g., a paper, composition, or performance) in consultation with the instructor. For majors only. Prerequisite: instructor permission. Mr. McGinn/Offered every semester

250 TUTORIAL IN JAZZ COMPOSITION

Student writes original scores for performance by a workshop ensemble. Prerequisite: 151 and permission of program director. Mr. Fidlon/Offered periodically

260 SENIOR TUTORIAL IN THEORY

Student develops work (e.g., a paper, composition, or performance) in consultation with the instructor. For majors only. Prerequisite: instructor permission. Mr. McGinn, Mr. Malsky/Offered every semester

Performance Courses

180 PRIVATE INSTRUCTION IN INSTRUMENTS AND VOICE

Areas offered include: piano, jazz piano, voice, jazz vocal, clarinet, saxophone, flute, classical guitar, jazz guitar, violin, viola, French horn, trumpet, bassoon, trombone and low brass, cello, percussion, string bass, and conducting. Lessons are taken for course credit. Students enrolled in Music 180 meet weekly with an instructor, attend either aural or keyboard skills labs, and participate in an ensemble. In areas not currently offered at Clark, the Music Program will find a qualified instructor. Award of credit in the off-campus study requires special permission from the program director. No credit is awarded for off-campus study in those areas currently available at Clark.

Prerequisites: for the minor, Music 010 and either Music 110 or Music 121; Qualified students may begin lessons prior to or along with Music 010 and either Music 110 or Music 121. Approved minors receive three semesters of lessons covered by tuition, majors receive two semesters of lessons (with options available with permission for one or two additional semesters covered by tuition), and majors in the Honors Performance track receive six semesters of lessons covered by tuition. Specific details are available in the music program office. Staff/ Offered every semester

280 PRIVATE INSTRUCTION IN INSTRUMENTS AND VOICE (HONORS LEVEL)

Areas offered: Same as 180 above. Students enroll in Music 280 for the final two semesters of the honors track, and a full recital is required as the culminating project for those two semesters. Prerequisites: 4 semesters of Music 180. Staff/Offered every semester

018 PRIVATE INSTRUCTION IN INSTRUMENTS AND VOICE

Lessons are taken for noncredit. Areas offered: same as 180 above. Lessons taken for noncredit require no prerequisite and are recommended for beginners. The fee is not covered by tuition. Staff/Offered every semester

Special Offerings

290 CAPSTONE PROJECT

299 SEC. 1 DIRECTED READING
Staff

299 SEC. 2 DIRECTED RESEARCH
Staff

299 SEC. 3 DIRECTED WRITING
Staff

299 SEC. 4 FIELD PROJECT
Staff

299 SEC. 5 SPECIAL PROJECT
Staff

299 SEC. 6 SPECIAL TOPICS
Staff

299 SEC. 7 DIRECTED STUDY IN COMPUTER MUSIC

STAFF

299 SEC. 8 HONORS
Staff

299 SEC. 9 INTERNSHIP
Staff

The following musical activities are open to all undergraduate and graduate students.

Auditions are held during the first week of each semester. Although no credit is awarded, the transcript of any undergraduate who completes the assigned performance requirements will include a listing of the particular activity for which he or she was registered.

170 CLARK CONCERT CHOIR/REHEARSAL, PERFORMANCE

A chorus of 30 to 40 voices, the choir presents two major concerts each year on the Clark campus as well as in off-campus appearances. Mr. Staff/Offered every semester

171 CLARK CHAMBER CHORUS/REHEARSAL, PERFORMANCE

This is a small, specialized singing group chosen from the larger Clark Concert Choir by the conductor. Admission is by audition. Staff/Offered every semester

172 CONCERT BAND/REHEARSAL, PERFORMANCE

Concert Band consists of 25 members performing two major concerts a year. Staff/Offered every semester

173 CHAMBER MUSIC ENSEMBLES/REHEARSAL, PERFORMANCE

The number of small ensembles is determined by the performing talent in a given semester. Standing ensembles include string, woodwind, mixed brass, jazz vocal. Admission is by audition. Staff/Offered every semester

174 JAZZ WORKSHOP & COMBO/REHEARSAL, PERFORMANCE

Includes ensemble performance practice with weekly rehearsals throughout the year. An audition is required. Mr. Fidlom/Offered every semester

SCREEN STUDIES

Program Faculty

Marcia Butzel, Ph.D.: *program director: French cinema, film and the other arts, screen theory and criticism*

Timothy Shary, Ph.D.: *American cinema, film genre, television studies*

Fred Simon, MFA.: *video and electronic media production*

Adjunct Faculty

Marvin D'Lugo, Ph.D., *Spanish and Latin American cinema*

Walter Schatzberg, Ph.D.: *German cinema*

Undergraduate Program

Clark offers one of the few undergraduate programs in the nation that specializes in screen studies, which deals with arts and artifacts of the moving two-dimensional image, usually combined with sound. It is concerned, in other words, with the study of film, television, video, and evolving forms of digital visual media. The program offers both a major and a minor, and stresses the importance of a liberal arts background, for the screen arts touch upon and are

affected by all sectors of contemporary culture and society. Screen Studies provides a core of basic and advanced knowledge of the screen arts and media while encouraging students to explore diverse connections and influences, ranging from the visual arts, drama, literature, and aesthetics to sociology, psychology, history, and economics.

Nonmajors take screen studies courses to acquire knowledge that relates to their interests in other disciplines, to gain a better understanding of the roles film and television play in their everyday lives, or to understand the importance of the screen media as cultural and artistic forms. Those considering careers in the screen arts or related areas usually major in screen studies. In addition to being of special benefit for those planning graduate study or a career in the communications fields, the major also may be of interest to those seeking a liberal arts education that speaks directly to questions of contemporary life, culture, and the arts. Students interested in film and video production may take the program's sequence of production courses and gain production experience through professional internships.

The Screen Studies Major

Students majoring in screen studies enroll primarily in courses on the history, theory, and criticism of film, broadcast television, and other forms of electronic media. Requirements include courses in Screen and courses in a related area, which may be discipline-specific (such as history, English, a foreign language/culture) or interdisciplinary (such as communication studies). The coherence of the related area is determined by the student and his or her major advisor. The major consists of at least 13 courses—a minimum of ten courses in Screen (see item 1 of the requirements below), and at least three courses in a related area, with one of those three courses at the advanced level (see item 2 below). For a course to provide credit toward the major, a letter grade of "C" or better must be achieved.

Requirements:

1. Majors are required to take a minimum of 10 courses in screen studies. Of the 10 screen studies courses, four are specifically required:
 - a. 10 Introduction to Screen Arts (to be taken as early as possible)
 - b. Screen 107 Introduction to Video Production, or its equivalent
 - c. Screen 114 Writing About Film: Critical Approaches
 - d. Screen 121: International Film Art Movements

In addition to these specific required courses, majors must complete:

- a. At least one screen history course such as 119 American Film From Its Origins Through WWII; 120 American Film Since WWII; or 122 History of American Broadcasting and Electronic Media.
 - b. One course in video production at a more advanced level than 107, or another production course such as Music 140, Arts 100, Arts 120, Arts 124, Theater 120, or Theater 212. (Students should choose the arts production course in consultation with their major advisor.)
 - c. One course on a national cinema such as 250 New German Cinema; 252 Asian Cinema; or 263 Studies in French Cinema.
 - d. One advanced topics course resulting in a major term paper, or advanced production project, chosen from 289, 288, or 299.5
 - e. Two additional elective screen studies courses to bring coursework to the 10 required screen studies courses.
2. Majors must demonstrate competence in a related area pertinent to the student's particular emphasis in screen studies. Requirements for the related area may be met by: completing requirements for a double major, or by completing three courses (chosen in consultation with the major

advisor) which together form a coherent group. Suggested related areas are: Screen Arts Production; Foreign Language and Culture; or Politics, Society, and the Audiovisual Media. One course in the related area must be at the 200-level.

Honors in Screen Studies

Students with a strong interest and commitment to advanced study in the program and who have completed at least six screen studies courses with at least a B+ average, may, with the program's approval, elect the honors sequence during their senior year: Screen 289 Advanced Topics or equivalent and a one-or two-unit senior thesis. Students are expected to use the honors course to develop an extensive research project on some aspect of film history, criticism, or theory selected with their major advisor. Students planning to go on to graduate work in screen studies are encouraged to apply for the honors sequence.

Internships, Study Abroad

As an elective, one unit of internship credit (299 Sec. 9 Internship) can be counted toward the major. In past years, students have held internships with local and regional media concerns, such as WCCA-TV in Worcester and WHDH-TV in Boston, and with independent production companies in New York and London. Students have also interned at a large, local archive of historic film posters and advertising. Majors have opportunities for study abroad, often by pursuing 1-2 units of academic coursework and an internship during one semester. Clark's London Program has been the primary sponsor for study abroad in the major.

Nonmajors

All of the courses, seminars, and activities in the screen studies program are open to qualified nonmajors. Students who have a strong interest in screen studies but whose major lies in another discipline can declare a minor in screen studies. The minor consists of six courses.

The Screen Studies Minor Requirements:

- 1. 10 Introduction to Screen Arts
- 2. 107 Introduction to Video Production
- 3. One screen history course selected from 119, 120, 121, or 122
- 4. One course on a national cinema such as 250, 252, or 263 or another 200-level course
- 5. 114 Writing About Film: Critical Approaches
- 6. One elective in Screen Studies chosen in consultation with a program advisor.

Courses

Note: The courses listed below are designated as lecture, discussion, or seminar. However, all screen studies courses include viewing of films and/or television programming. Students are usually required to attend separate screening periods in addition to lecture, discussion, or seminar sessions.

10 INTRODUCTION TO SCREEN ARTS/LECTURE, DISCUSSION

Introduction to film and related screen media, with emphasis on critical thought and analysis. The course begins with attention to aspects of filmmaking activities — such as cinematography, editing, and sound — then explores more contextual screen areas such as art film traditions, screen genres, auteur theory, gender and representation, etc. Students actively analyze films in detail to foster an understanding of screen styles and meanings. Fulfills prerequisites for advanced screen studies courses. Mr. Shary/Offered every semester

107 INTRODUCTION TO VIDEO PRODUCTION/STUDIO, LECTURE, DISCUSSION

Workshop in seeing and thinking in electronic imaging techniques and processes. Open to non-majors, with preference to majors. Mr. Simon/Offered every semester

114 WRITING ABOUT FILM: CRITICAL APPROACHES/SEMINAR

Surveys a variety of critical methods for the interpretation of what films mean. Building upon basic formalist skills for describing and analyzing film form (narrative, film style, aes-

thetics, etc.) the course considers how critical methodologies such as adaptation analysis, genre criticism, auteurism, psychoanalytic criticism, and cultural criticism approach the task of criticism and, often, reach different conclusions about a film's significance. Prerequisite: Screen 10 or permission. Ms. Butzel/Offered every year

119 AMERICAN FILM FROM ITS ORIGINS THROUGH WWII/LECTURE, DISCUSSION

The history of the emergence and entrenchment of the Hollywood studio production system and the consolidation of a style of filmmaking now described as the classical Hollywood cinema. Topics to be covered include: silent filmmaking; the emergence of the star system, feature-length narrative filmmaking and film genres; the disruption of the coming of sound; the impact of the Depression and two World Wars; and the start of Hollywood's golden era. Mr. Shary/Offered every other year

120 AMERICAN FILM SINCE WWII/LECTURE, DISCUSSION

The history of post-WWII American cinema is the story of an ongoing series of adjustments to (or developments within the context of) instability in post-war film business: film noir, 3-D, biblical epics, blockbusters, art film influences, "new blood" from TV and film schools, Black filmmaking, revisionist genre films, "high concept" filmmaking, etc. Further complicating this process of adjustments, cinema was overlaid onto, and consequently influenced by, the political turmoil within American society in general: the "Red Scare," the Vietnam War, the emergence of a mass counterculture, the anti-war movement, Watergate, Reaganomics, the end of the Cold War, and increasingly vocal demands by women and minorities for social equality (and media representation). Mr. Shary/Offered every other year

121 SURVEY OF INTERNATIONAL FILM ART MOVEMENTS/LECTURE, DISCUSSION

Broad survey designed to acquaint students with major foreign movements in cinema history. Includes readings on and screenings of

examples selected from Italian silent epics, German Expressionist and Weimar cinema, Soviet montage school, Soviet socialist realism, British documentary school, Nazi cinema, Italian neo-realism, Japanese classical cinema, French New Wave, post-New Wave political cinema, Third World cinema, New German Cinema, and various Eastern European schools. Ms. Butzel/Offered every year

122 HISTORY OF AMERICAN BROADCASTING AND ELECTRONIC MEDIA/LECTURE, DISCUSSION

This course considers how broadcasting and electronic media have been developed over the past century. We will examine the technical achievements of the field as well as its social and aesthetic impacts: from early electrical and wireless communication (telephone, radio), to mid-century inventions (television, satellites), and more recent innovations (cable, digital technology). We will sample a wide range of media productions, including early radio and TV shows, documentaries, and current media phenomena. Students will do some of their own historical research on broadcasting to supplement the course material. Mr. Shary/Offered every other year

123 FACTUAL FILM AND TELEVISION/LECTURE, DISCUSSION

An overview of film and television genres associated with factual and documentary filmmaking. A wide array of documentaries are used to examine socio-cultural topics, such as art, gender, modernity, and race. Focuses particularly on how certain stylistic means of filmmaking shape our understanding of subject matter and themes. Recent experiments with cinema, such as performativity, surrealism, and reenactment — that blur the line between fiction and fact — will also be addressed. Staff/Offered every other year.

130 FILM GENRE/LECTURE, DISCUSSION

Devoted to the study of the major storytelling formats into which much narrative filmmaking (especially that of the American cinema) may be categorized. The course considers theoretical perspectives, formal description, historical background, and social implications of genres

such as the western, gangster film, musical, melodrama, etc., and through this work enables students to engage in and experience the interpretive insights of this critical perspective on the cinema. This course is taught as a variable topic, and may be offered as either an overview of several film genres or as a course concentrating on intensive study of a particular genre. Staff/Offered every other year

140 FILM AUTHORS AND AUTHORSHIP/LECTURE, DISCUSSION

Examines the theory and practice of film authorship through a consideration of works by major American and international film authors. Studies historical development of the idea of film directors as authors in Europe and the United States. Emphasizes the impact of such theories on the study of various American figures, which may include Hawks, Ford, Hitchcock, and Coppola, as well as international figures. Also examines the formation of film authorship in emerging cultural contexts, such as women's cinema and new national cinemas. Ms. Butzel/Offered every other year

161 CRITICAL PERSPECTIVES ON TV CULTURE/LECTURE, DISCUSSION

Pursues fundamental questions about television through the complex mechanisms of contemporary criticism and popular culture. To understand how television functions, for instance, you must understand certain aspects of its mechanics, economics, and politics. To understand what television means to people, we confront a matrix of even more varied human dimensions, which are more difficult to identify. How is television studied? How is meaning created through the audio/visual domain of television? How does that meaning come to be popular? What is at stake in the production and consumption of television? Mr. Shary/Offered every other year

171 STORYTELLING THROUGH VIDEO: DOCUMENTARY AND DRAMATIC PRODUCTION/STUDIO, LECTURE, DISCUSSION

Students in this class will produce one or two "storytelling" videos. Students may work either in the documentary or dramatic genre, and

may work individually and collaboratively on each project. Class time will be used for viewing and discussing the students' videos as they progress, and viewing and analyzing professionally-made films and videos. All pre-production, production, and post-production work will be done outside of class (including preparation of scripts or treatments, shooting, separate sound or archival recording, if necessary, and editing). In addition to production work, students will also keep a journal in which they record insights they derive from the filmmaking or film viewing related to this course. Many of the works screened in the course are regionally-produced, and some of the filmmakers will appear with their films. Mr. Simon/Offered once a year

207 INTRODUCTION TO DIGITAL/NON-LINEAR VIDEO EDITING/STUDIO, LECTURE, DISCUSSION

Digital non-linear editing is revolutionizing how films and videos are created. Using a professional non-linear video editing system (Apple's Final Cut Pro), students will learn the technology, art, and craft of digital editing. Working from footage shot for this course, each student will create a finished piece using Final Cut software to digitize, edit, and create a variety of effects and titles. Pre-requisite: 107 and permission of instructor. Mr. Simon/Offered once a year

246 STUDIES IN SPANISH CINEMA/LECTURE, DISCUSSION

See Spanish 246. Mr. D'Lugo/Offered periodically

248 STUDIES IN LATIN AMERICAN CINEMA/LECTURE, DISCUSSION

See Spanish 248. Mr. D'Lugo/Offered periodically

249 STUDIES IN HISPANIC CINEMAS/SEMINAR

See Spanish 249. Mr. D'Lugo/Offered periodically

250 THE NEW GERMAN CINEMA/LECTURE, DISCUSSION

See German 150. Mr. Schatzberg/Offered periodically

252 ASIAN CINEMAS/LECTURE, DISCUSSION

How different was/is the Asian cinema from the classical Hollywood cinema which has dominated the world's commercial filmmaking as a model to be either imitated or resisted? The course addresses the issue of difference "from the outside" by engaging in: the study of the history of various Asian film industries; identification of the characteristic storytelling formats of Asian cinema; formal analysis of the stylistic signatures of its master directors (such as Kurosawa, Ozu, Ray, Yimou, Woo); and study of western criticism's discourse on these national cinemas. Staff/Offered every other year

263 STUDIES IN FRENCH CINEMA/LECTURE, DISCUSSION

Studies major experiments and classical traditions of French cinema prior to 1940. Analyzes films, film scripts, criticism, and some film theory, emphasizing the development of film as an art and the importance of the cinema to French culture and society. Post-colonial cinema will be considered. Ms. Butzel/Offered every other year

284 FILM AS NARRATION/LECTURE, DISCUSSION

Explores a central approach to the study of film and gives students intensive training in film analysis. Students will become familiar with trends in narrative theory in order to analyze a range of narratives from world cinema. Specific concepts and topics to be considered include point of view, story structure, semiotic codes, the impression of reality, voice, and spectator positioning. Relationships between film and other art forms will also be considered. Prerequisite: 114 or instructor permission. Ms. Butzel/Offered every other year

288 GENDER AND FILM/VARIABLE FORMAT

Explores the ways that gender is produced by the "social technologies" of film and video. Examines concepts of sexual difference (masculinity and femininity) and organizing representation, narrative, and spectatorship in Hollywood and alternative cinemas, and in some television and video. Will also study the

history of women's cinema. Readings will be primarily theoretical and critical, featuring the contributions of feminist film scholars and critics. Ms. Butzel, Mr. Shary/Offered every other year

289 ADVANCED TOPICS IN SCREEN STUDIES/ SEMINAR

Advanced studies of specific issues and approaches in screen arts. Topics vary and include: inventing the feature film; the idea of a national cinema; the youth film as a genre; psychological approaches to film narrative; non-western filmmaking. Students produce a major term paper. Prerequisite: 10 and 114, or instructor permission. Staff/Offered every year

Special Offerings

299 SEC. 1 DIRECTED READING

Staff

299 SEC. 2 DIRECTED RESEARCH

Staff

299 SEC. 3 DIRECTED WRITING

Staff

299 SEC. 4 FIELD PROJECT

Staff

299 SEC. 5 SPECIAL PROJECT

Staff

299 SEC. 6 SPECIAL TOPICS

Staff

299 SEC. 9 INTERNSHIP

Staff

THEATER ARTS

Program Faculty

Raymond J. Munro, M.A.H., *program director: directing, acting theory, independent narrative video*

Gino DiIorio, M.F.A.: *playwriting, modern drama, acting, Shakespeare*

Part-Time Faculty

Christine Weinrobe: *scenic, lighting, and costume design, technical theater*

Catherine Quick Spingler, M.A.: *costume design*

Diane Hovenesian, B.A., C.A.T.: *Alexander Technique*

Jay Hovenesian, B.A., C.A.T.: *Alexander Technique*

Adjunct Faculty

Paul Burke, Ph.D.

Hartmut Kaiser, Ph.D.

Michael K. Spingler, Ph.D.

Virginia Vaughan, Ph.D.

Undergraduate Program

At the core of the theater program lies the strong belief that a liberal arts education is inherently inseparable to the artist's process. This relationship provides a cornerstone for the practice and study of theater, as theater by its very nature is a multi-disciplined art form. The theater program is designed to attain a balance between a strong liberal arts education and intensive study in the student's chosen area of focus.

The program places a strong emphasis on performance as a teaching tool for students at many different levels of work. Each semester, the program presents professionally directed productions of classic and contemporary theater. There are also opportunities to act and direct in student sponsored classes, workshops and productions. Theater productions are open to all Clark students. The program is designed to meet the needs of the major who

may eventually wish to pursue a professional career in theater, as well as the non-major, who may simply want to gain a greater understanding of the play or the performance process.

The Center for Contemporary Performance is a scholarly community of directors, composers, playwrights, choreographers, film/video makers, and critics devoted to the creation, development, and publication of contemporary works of art. The Center is designed to enhance the academic work of the University by organizing and focusing advanced learning through seminars and directed study in music, theater, film, design, literature, and aesthetics. The Center enables students and faculty to work with visiting artists and outside performance groups, thereby enriching their educational experience and the creative process. Advanced students are encouraged to develop creative and theoretical projects to take advantage of the critical evaluation and supervision available through the Center for Contemporary Performance.

The Theater Arts Major is designed to offer an interdisciplinary framework that serves as foundation for the student to enter their primary area of expertise. Once the basic course requirements have been fulfilled, there is a great deal of flexibility in developing a program well suited to the individual needs and interests of the student. The faculty takes a proactive role in the design of this program, preparing the student to enter their chosen field or next level of study.

The Theater Arts Major

The major consists of 15 courses: 5 core courses, 5 specialty courses (focusing on the student's area of expertise and interest), and 5 related courses (chosen to complement the student's professional program). The 5 core courses are required of all majors. Majors may specialize in acting, directing, technical theater, theatrical dramatic criticism and playwrit-

ing, as well student-initiated areas of study and focus. Students may also major in theatre with an emphasis on literature and dramatic criticism. Related courses are to be chosen in consultation with an advisor and are to be weighted heavily toward a sound liberal arts education.

Required of all majors:

1. Core Courses

- 112 The Creative Actor
- 212 Actor as Thinker
- 153 Modern Drama
- 144 Drama of the Western Tradition
- 120 Basic Technical Theater

2. Specialty Courses

Five Theater Arts courses specializing in a single area (e.g. Acting, Directing, Technical Theater, Dramatic Criticism, Theatrical Design, Playwriting). At least two of these courses must be at the 200 Level.

3. Related Courses

A set of five courses outside theater arts but related to the student's area of specialization, (e.g. performance projects, internships, directed readings, or courses in English, Literature, Music, History, Philosophy) and selected in consultation with the student's advisor.

The Capstone Requirement

The Capstone Experience for both majors and minors will usually be participation in or working on productions, often in the form of a Special Project, Directed Reading, Directed Research, Field Project, or Internship. Such projects might include directing a play, researching a role, building a show, stage managing, or writing a play, and might involve working in/on V&PA productions, student productions, and production off campus. In some cases, the Capstone experience might be a critical or research paper or thesis.

Honors Program

Students with distinguished academic records who wish to take honors in Theatre Arts should consult the program director early in their junior year, to identify a project of interest and choose an honors advisor. The student is expected to use the honors program to develop an independent work, which displays their skills and capabilities in their chosen field. This can take the form of writing a play, performing a role, etc., with an emphasis on attaining a professional standard of work. The thesis must be performed and/or presented as a senior and will be reviewed by a faculty panel.

Nonmajors

All courses and seminars in the theatre arts program are opened to qualified nonmajors. Students whose major lies in another discipline can declare a minor in theatre arts, developing a complementary sequence of courses in any field within the program.

Courses

107 INTRODUCTION TO VIDEO PRODUCTION/STUDIO, LECTURE, DISCUSSION

Workshop in seeing and thinking in electronic imaging techniques and processes. Open to non-majors. Mr. Simon/Offered every semester

111 VOICE AND DICTION/STUDIO, TUTORIAL

An intensified phonetic approach to articulation and voice production with some emphasis on speech for the stage and for public occasions. Several laboratory sessions will be provided for individual coaching by the instructor. This course is non-graded; it must be taken on a credit/no credit basis. Staff/Offered every year

112 THE CREATIVE ACTOR/STUDIO

Through a series of workshops, the student becomes familiar with the basic tools necessary to the art of acting. The approach is based on the techniques of Stanislavski, Viola Spolin, Joseph Chaikin, Robert Cohen, and original

exercises, including an introduction to basic voice and movement for the actor. Limited to 25 students. Mr. Munro, Mr. DiLorio/Offered every semester

116.1 MOVEMENT FOR THE PERFORMING ARTIST: THE ALEXANDER TECHNIQUE

The Alexander Technique is a mind/body teaching method that employs experiential learning. The course will focus on moving and thinking freely in the artistic process and everyday life. Students will learn how to recognize and change habits that cause unnecessary worry, tension, and fatigue. Performance movement, public speaking, and other activities will be used as ways for students to observe themselves in action. By understanding how they respond in activity, students will become adept at making choices, which will encourage their innate ability to work and perform with freedom and ease. Mr. and Ms. Hovenisian/Offered every year

119 PUBLIC SPEAKING/STUDIO

Students are required to make as many speeches as time permits, so that they may master the fundamentals of public speaking, including the most common situations: presentation of information and persuasive speaking. Staff/Offered every year

120 TECHNICAL THEATER/STUDIO, LECTURE

Introduction to theatrical production. Techniques and organization involved in providing the stage with scenery, lights, and properties. Introduces drafting, scaled ground plans, elements of design, and styles of production. Makeup, lighting, and set construction in applied lab/crew requirements. Ms. Weinrobe/Offered every semester

123 DESIGN FOR PERFORMANCE/STUDIO, TUTORIAL

Theory of design/function of visual artist in relationship to production, director, or choreographer. Collaboration in and development of

performance art. Historical research in styles of ornament and production. Drawing, painting, and model building. Lab/crew assignments. Ms. Weinrobe/Offered every year

125 THEATRICAL DESIGN PROJECTS/STUDIO, TUTORIAL

Intermediate level projects in design and presentation techniques for theater productions. Work in areas of scenery, costume, or lighting design. Prerequisite: Theatre 120. Ms. Weinrobe/Offered every semester

126 THE PHYSICAL THEATER/ENVIRONMENTAL STUDIO/STUDIO, TUTORIAL

Study of designed environment and structure as it relates to performance and the physical theater as well as contemporary installation projects. Study of public spaces, theater architecture, and site-specific work. Ms. Weinrobe/Offered every other year

127 ANALYSIS OF THEATER PRODUCTION/SEMINAR

Examination of live theater productions through written and verbal criticism. Critical elements of the concept of production explored through assigned readings and the development of a production proposal/concept. Attendance required at scheduled evening and/or weekend performances in the Worcester/Boston area. A lab fee will be collected to pay for tickets and bus rental. Ms. Weinrobe/Offered periodically

144 DRAMA OF THE WESTERN TRADITION/LECTURE, DISCUSSION

Surveys the traditional dramatic canon of the Western tradition. Reading will include plays by Sophocles, Plautus, anonymous writers of the medieval cycles and morality plays, Marlowe, Shakespeare, Webster, Jonson, Moliere, Congreve, Sheridan, and Wilde. Ms. Vaughan/Offered every year

153 MODERN DRAMA/LECTURE, DISCUSSION

Surveys the major dramatic writers from the 19th to the present. In studying the plays, a number of different points of view and reference will be considered including that of the playwright, the actor, the director, the historian, and the dramaturge. The student will be encouraged to arrive at a personal evaluation of the plays. Mr. DiIorio/Offered every year.

171 STORYTELLING THROUGH VIDEO: DOCUMENTARY AND DRAMATIC PRODUCTION/STUDIO, LECTURE, DISCUSSION

Students in this class will produce one or two "storytelling" videos. Students may work either in the documentary or dramatic genre, and may work individually and collaboratively on each project. Class time will be used for viewing and discussing the students videos as they progress, and viewing and analyzing professionally-made films and videos. All pre-production, production, and post-production work will be done outside of class (including preparation of scripts or treatments, shooting, separate sound or archival recording, if necessary, and editing). In addition to production work, students will also keep a journal in which they record insights they derive from the filmmaking or film viewing related to this course. Many of the works screened in the course are regionally-produced, and some of the filmmakers will appear with their films. Mr. Simon/Offered once a year.

205 THE PLAY AND ITS STAGES/SEMINAR, WORKSHOP

A critical approach to the dramatic text based on historical and material conditions of performance. Considers the changing ways that meanings are made through styles and conventions of performance (including set, costume, mask, and vocal delivery) that are specific to historical and cultural moments. Playwrights considered may include Sophocles,

Shakespeare, Racine, Molière, Chekhov, Ibsen, Brecht, Genet, and Beckett. There is scene work in class. Mr. Spingler/Offered periodically

206 LANGUAGES OF THEATER/SEMINAR, DISCUSSION

Studies the way meanings are made in theater through structure and sign. Examines the function of non-verbal communication in theater, especially mask, gesture, movement, and sound. Examines the influence of certain non-western dramatic traditions such as Noh and Kabuki upon a number of western experimental theaters. Plays may include Euripides' *The Bacchae*, Shakespeare's *The Tempest*, Cocteau's *Eiffel Tower Wedding Party* and *Orpheus*, Apollinaire's *The Breasts of Tiresias*, Jarry's *Ubu Roi*, Genet's *The Balcony*, and Pinter's *Homecoming*. Critical works read include Artaud's *The Theater and its Double*, Brook's *The Empty Space*, and Grotowski's *Towards a Poor Theater*. There will be scene work in class. May be taken as a companion course to 205. Mr. Spingler/Offered periodically

212 ACTOR AS THINKER/STUDIO, LECTURE, DISCUSSION

A conceptual approach to acting theory and its application. Student develops a greater understanding of script analysis, characterization, style, and the relationship of the actor to the audience. A basic course for all students who intend to continue in acting and directing, and a prerequisite for 213 Studio, and 219 Directing Seminar. Prerequisite: 112. Limited to 15 students. Mr. Munro/Offered every semester

213 STUDIO

A scene-study course applying the methods, theories, and approaches discussed in Actor as Thinker to working on stage, film, and video. Students are required to present several scenes of different periods and styles for discussion, critical written review, and further development by classmates and director. Content varies each time the course is taught. May be repeated for credit. Lab and crew hours are required. Prerequisite: 212. Mr. Munro, Mr. DiIorio/Offered every semester

214 SHAKESPEARE IN ACTION/STUDIO

This acting course concentrates on the major works (*Hamlet*, *Macbeth*, *Twelfth Night*, *Romeo and Juliet*, etc.), giving the actor an introduction to Shakespeare. The actor is encouraged to maintain the same approach and techniques used in other scene work, while adding the challenge of verse and heightened language. The focus of the class is to take a Shakespearean play and create the illusion of the first-time performance. Mr. DiIorio/Offered periodically

219 DIRECTING SEMINAR

Introduces the principles of directing for the stage through theory, practical application, and discussion. Students study problems of interpretation and concept; the role of the director as creative and interpretive artist; and relationship to designer, stage manager, and actors. Additional lab time is required. Prerequisites: 213 and instructor permission. Mr. Munro/Offered every year

225 ADVANCED THEATRICAL DESIGN PROJECTS

Advanced-level projects in design. May be repeated for credit. Prerequisite: instructor permission. Ms. Weinrobe

226 ADVANCED PRODUCTION PROJECTS

Introduces the business and practical execution of theatre productions. Students learn techniques in organizing and managing different areas and departments. Requirements include participating in a supervisory position on a department show. Positions in outside theaters accepted for credit. Ms. Weinrobe

230 PLAYWRITING

Designed to give the young writer a different medium of expression. Students learn basic techniques of stagecraft including dialogue and character development, as well as dramatic structure and the technical elements of a play. Students will write every week and complete assignments to be read in class. Mr. DiIorio/
Offered every year

256 SHAKESPEARE FROM PAGE TO STAGE/LECTURE, WORKSHOP

See English 256. Ms. Vaughan and Mr. DiIorio/Offered periodically

Special Offerings

299 SEC. 1 DIRECTED READING

Staff

299 SEC. 2 DIRECTED RESEARCH

Staff

299 SEC. 3 DIRECTED WRITING

Staff

299 SEC. 4 FIELD PROJECT

Staff

299 SEC. 5 SPECIAL PROJECT

Staff

299 SEC. 6 SPECIAL TOPICS

Staff

299 SEC. 9 INTERNSHIP

Staff

With permission of the program director, the following courses offered by other departments may be taken for theater history and literature credit:

CLASSICS 135 CLASSICAL GREEK TRAGEDY/LECTURE, DISCUSSION

See Ancient Civilizations.

ENGLISH 120 INTRODUCTION TO SHAKESPEARE/LECTURE

See English. Ms. Vaughan/Offered every year

ENGLISH 253 ADVANCED STUDIES IN SHAKESPEARE/SEMINAR

See English. Ms. Vaughan/Offered every year

FRENCH 165 FRENCH DRAMATIC EXPRESSION: PLAY PRODUCTION/LECTURE, DISCUSSION

See Foreign Languages and Literatures. (In French.) Mr. Spingler/Offered every other year

FRENCH 170 THE COMIC SPIRIT IN FRENCH TEATER/LECTURE, DISCUSSION

See Foreign Languages and Literatures. (In French.) Mr. Spingler/Offered every other year

Concentrations



ASIAN STUDIES

Participating Faculty

Paul S. Ropp, Ph.D., *program director: Chinese history*

Yuko Aoyama, Ph.D.: *Economic geography, Asia's Industrialization*

Gauvin A. Bailey, Ph.D.: *Asian art history*

William F. Fisher, Ph.D.: *Anthropology, political economy of South Asia*

Robert C. Hsu, Ph.D.: *Chinese and Japanese economies*

SunHee Gertz, Ph.D.: *Chaucer, medieval literature, semiotic theory*

Thomas P. Massey, Ph.D.: *Chinese history and U.S.-Asian trade*

Undergraduate Program

Asian Studies is an interdisciplinary concentration that can be taken as a complement to any major. The concentration requires six Asian studies courses. Of these six courses, three may be selected from language courses; the other three must be selected from non-language courses. The concentration further requires that two of the non-language courses must be 200-level courses and one must include a significant research component. Students concentrating in Asian Studies are encouraged, though not required, to take at least one year of Chinese or Japanese language, and to study one year abroad in Asia.

Through Clark's Study Abroad Office, students may apply to enroll at Kansai Gaidai University near Osaka, Japan, or at the CET program in Beijing, for language and other courses on Japan or China. Students may spend one year or one semester at Kansai Gaidai which requires at least one year of

Japanese language prior to study in Japan. The CET program in Beijing is available for one semester each year in the spring term. Enrollment in the CET program requires at least three semesters of Chinese language study prior to enrollment in China. Clark offers Chinese and Japanese language courses at the beginning and intermediate levels, and advanced Japanese as well. Through the Colleges of Worcester Consortium, students may also take advanced Chinese and other Asia-related courses at the College of the Holy Cross. Students who concentrate in Asian Studies are also encouraged to take courses from the following list of related courses: GEOG 127, Political Economy of Third World Underdevelopment; GEOG 184, Landscapes of the Middle East; GOVT 117, Revolution and Political Violence; GOVT 261, Women and Militarization in a Comparative Politics Perspective; ID 125, Development Problems; and (depending on the topic) HIST 291, Seminar in Advanced Topics in International Relations. Although these courses do not carry Asian Studies credit, they deal with Asia and therefore supplement the list of regular Asian Studies courses that follows.

Courses

033 CONFUCIANISM, DAOISM, BUDDHISM/FIRST-YEAR SEMINAR

See History 033. Mr. Ropp/Offered every other year

080 INTRODUCTION TO MODERN ASIA/LECTURE

Compares native traditions, colonial experiences, and post-colonial developments in Asia since 1800, using historical and journalistic counts and literary selections. Mr. Ropp/Offered every other year

084 JAPANESE CIVILIZATION/LECTURE, DISCUSSION

See History 084. Staff/Offered periodically

CHINESE 101-102 BEGINNING CHINESE/LECTURE, DISCUSSION

See Chinese 101-102. Staff/Offered every year

CHINESE 103-104 INTERMEDIATE CHINESE/LECTURE, DISCUSSION

See Chinese 103-104. Staff/Offered every year

JAPANESE 101-102 ELEMENTARY JAPANESE/LECTURE, DISCUSSION

See 101-102. Staff/Offered every year

JAPANESE 103-104 INTERMEDIATE JAPANESE/LECTURE, DISCUSSION

See Japanese 103-104. Staff/Offered every year

JAPANESE 105-106 ADVANCED JAPANESE/LECTURE, DISCUSSION

See Japanese 105-106. Prerequisite: Japanese 104-105 or permission of instructor. Ms. Aoki/Offered every year

107 MIRACLES OF ASIA: ECONOMIC GROWTH IN GLOBAL CONTEXTS/LECTURE, DISCUSSION

See Geography 107. Ms. Aoyama/Offered every year

160 THE ARTS OF ASIA/LECTURE, DISCUSSION

Mr. Bailey/Offered every other year

161 HISTORY OF INDIA/LECTURE, DISCUSSION

See History 161. Staff/Offered periodically

177 JAPANESE AND CHINESE ECONOMIES/LECTURE, DISCUSSION

See Economics 177. Mr. Hsu/Offered every year

181 CHINESE CIVILIZATION/LECTURE, DISCUSSION

See History 181. Mr. Ropp/Offered every other year

182 MODERN CHINA/LECTURE, DISCUSSION

See History 182. Mr. Ropp/Offered every other year

184 MODERN JAPAN/LECTURE, DISCUSSION

See History 184. Staff/Offered every other year

232 CONVERGING CULTURES IN THE AGE OF DISCOVERY/SEMINAR

See Art History 232. Mr. Bailey/Offered periodically

233 CONFUCIANISM, DAOISM, BUDDHISM/LECTURE, DISCUSSION

See History 233. Mr. Ropp/Offered periodically

254 STILL SPACES — EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM/SEMINAR

See English 254. Ms. Gertz/Offered every other year

266 HISTORY OF U.S.-EAST ASIAN TRADE RELATIONS/ LECTURE, DISCUSSION (COPACE)

Surveys the history of U.S.-East Asian trade and economic relations from the early 1800s to the present. Mr. Massey/Offered periodically

278 JAPAN SINCE 1945

See History 278. Staff/Offered periodically

279 LATE IMPERIAL CHINA/SEMINAR

See History 279. Mr. Massey and Mr. Ropp/Offered periodically

281 THE PEOPLE'S REPUBLIC OF CHINA/LECTURE, DISCUSSION

See History 281. Mr. Ropp/Offered periodically

282 CHINESE WOMEN IN LITERATURE AND SOCIETY/LECTURE, DISCUSSION

See History 282. Mr. Ropp/Offered every other year

286 THE VIETNAM WAR/LECTURE, DISCUSSION

See History 286. Staff/Offered periodically

288 SEMINAR IN CHINESE HISTORY

See History 288. Prerequisite: Asian Studies 080 or 181 or 182, or by permission. Mr Ropp/Offered periodically

296 WOMEN MIRRORED IN EAST AND WEST/SEMINAR

See English 296. Ms. Gertz and Mr. Ropp/Offered periodically

COMPUTATIONAL SCIENCE

Program Faculty

Raphael Bruschweiler, Ph.D.: *biomolecular dynamics*

Arthur Chou, Ph.D.: *algorithms, complexity*

Harvey Gould, Ph.D.: *computer simulation*

Fred Green, Ph.D.: *theory of computation, structural complexity*

Todd Livdahl, Ph.D.: *population biology, biostatistics*

Natalia Sternberg, Ph.D.: *applied mathematics, scientific computing*

Undergraduate Program

The enormous progress in computational technology has generated a new methodology for learning and advancing the traditional sciences such as physics, chemistry, and biology.

Computational science combines the application of numerical methods, models, and algorithms in the context of solving problems that are intractable by traditional methods. It is distinct from computer science, which is the study of computers and computation, and it is different from theory and experiment, the traditional forms of science, in that it seeks to gain understanding principally by the analysis of mathematical models.

The goal of the computational science concentration is to provide an opportunity for students to learn about the interplay between science and computation. The concentration is especially suitable for undergraduate students majoring in the sciences, mathematics, or computer science, but students in other majors will be considered on an individualized basis.

Students completing the computational science concentration would be able to enter graduate programs in their majors or in newly created interdisciplinary graduate programs in computational science and would be well prepared to go into industry.

Concentration Requirements

Because of the sequential nature of many of the requirements and the relatively large number of major requirements for students in the concentration, students are encouraged to plan early and carefully. A student's choice of advanced courses must be approved by the concentration faculty. Typical course schedules for biology, chemistry, computer science, mathematics, and physics majors are given on the associated Web site, http://science.clarku.edu/compu_sci.html. The requirements vary depending on the student's major and interests, but all students are required to complete the following (or equivalent):

Introductory courses

CSci 101 (or the equivalent), 102

Math 120, 121 or 124, 125

One year of chemistry or physics

Phys 125 Computer Simulation Laboratory
(Phys 125 can be substituted for CSCI 101)

Advanced courses

Four additional courses are required from a list of recommended courses with the approval of the program faculty.

Bio 280 Biostatistics and Computer Applications

CSci 160 Data Structures and Algorithms

CSci 210 Artificial Intelligence

Csci 211 Topics in Artificial Intelligence

Math 114 Discrete Mathematics

Math 212 Numerical Analysis

Phys 215, Advanced Computer Simulation Laboratory

Research project

A minimum of a one-semester research project with a member of the program faculty.

ENVIRONMENT AND SOCIETY

Program Description

The Environment & Society Concentration is an interdisciplinary minor which may be taken in conjunction with any major at Clark. The concentration is richly interdisciplinary, drawing upon courses and faculty from more than a dozen departments and programs. The participating Clark faculty are renowned scholar/teachers with extensive records of important environmental research on topics including global climate change, tropical deforestation, desertification, urban ecology, nuclear waste management, resource management, environmental ethics, watershed ecology, and international environmental regulation. Many are affiliated with the Marsh Institute's Center for Environment, Technology, and Development. Nearly all have active consulting relationships with corporations, governmental bodies, or non-governmental organizations involved in environmental affairs.

The concentration requirements are designed to ensure that all concentrators acquire a shared core of environmental knowledge and competence which spans the social sciences, humanities, and natural and life sciences. Students may obtain information on job opportunities, internships, field programs and research opportunities through the program office.

Program Committee

Patrick Derr, Ph.D., *Program Director, Professor of Philosophy; environmental ethics; environmental and occupational hazards management; philosophy of science*
Sarah Buie, M.F.A., *Associate Professor of Visual and Performing Arts; environmental aesthetics; graphic design*
Susan Foster, Ph.D., *Associate Professor of Biology; ecology; evolutionary biology; population biology*
Jacqueline Geoghegan, Ph.D., *Assistant Professor of Economics*

Dón Nelson, Ph.D., *Professor of Chemistry; environmental chemistry; protein chemistry*
Dianne Rocheleau, Ph.D., *Associate Professor of Geography, political ecology; cultural systems ecology; forestry; agriculture and land use; environment and development.*

Participating Faculty

David Angel, Ph.D., *Laskoff Professor of Economics, Technology & Environment*
Parminder Bhachu, Ph.D., *Luce Associate Professor of Cultural Identities and Global Processes*
Leslie Blatt, Ph.D., *Professor of Physics and Education*
Sarah Buie, Ph.D., *Associate Professor of Visual and Performing Arts*
Halina Brown, Ph.D., *Professor of Environmental Health*
John Conron, Ph.D., *Professor of English*
Brian Cook, Ph.D., *Professor of Government*
Elie Crocker, Ph.D., *Assistant Professor of Studio Art*
Patrick Derr, Ph.D., *Professor of Philosophy*
Timothy Downs, Ph.D., *Assistant Professor of International Development & Social Change*
Ronald Eastman, Ph.D., *Director, Graduate School of Geography*
Jacque Emel, Ph.D., *Associate Professor of Geography*
William Fisher, Ph.D., *Associate Professor of International Development & Social Change*
Richard Ford, Ph.D., *Professor of International Development & Social Change*
Susan Foster, Ph.D., *Associate Professor of Biology*
Robert Goble, Ph.D., *Research Associate Professor of Environmental Science & Policy*
Joseph Golec, Ph.D., *Associate Professor of Management*
Dale Hattis, Ph.D., *Research Associate Professor of Environmental Science & Policy*
Stanley Herwitz, Ph.D., *Professor of Geography*
Christopher Hohenemser, Ph.D., *Professor of Physics and Environmental Science & Policy*

Douglas Johnson, Ph.D., *Professor of Geography*

Laurence Lewis, Ph.D., *Professor of Geography*

Todd Livdahl, Ph.D., *Professor of Biology*

Bruce London, Ph.D., *Professor of Sociology*

Robert Mitchell, Ph.D., *Professor of Geography*

Don Nelson, Ph.D., *Professor of Chemistry*

Richard Peet, Ph.D., *Professor of Geography*

Frank Puffer, Ph.D., *Professor of Economics*

Sam Ratick, Ph.D., *Associate Professor of Geography and Environmental Science & Policy*

Dianne Rocheleau, Ph.D., *Associate Professor of Geography*

Joseph Sarkis, Ph.D., *Associate Professor of Management*

Justin Thackeray, Ph.D., *Assistant Professor of Biology*

B.L. Turner, Ph.D., *Milton and Alice Higgins Professor of Environment and Society*

Walter Wright, Ph.D., *Associate Professor of Philosophy*

Concentration Requirements

The Environment and Society Concentration requires a minimum of seven courses.

1. One Core Course dealing with environmental issues from the perspectives of the social sciences and chosen from the following options:
 - ES 180 Earth Transformed by Human Action
 - ES 155 Economics of Natural Resources and the Environment
 - ES 126 Political Economy of Resource Management
2. One Core Course dealing with environmental issues from the perspectives of the natural and life sciences and chosen from the following options:
 - ES 122 Ecological Systems
 - ES 080 Perspectives in Environmental Chemistry
 - ES 104 Biodiversity

3. One Core Course dealing with environmental issues from the perspectives of the arts and humanities and chosen from the following options:
 - ES 120 Sacred Space
 - ES 010 Environment and Culture
4. One Core Course dealing with environmental issues from the perspective of ethics and public policy:
 - ES 123 Environmental Ethics
 - ES 157 The Politics of Environmental Issues
5. Two Elective Courses, including at least one at the 200 level, chosen from the following. Note that the same course may not be used to fulfill both a core requirement and an elective requirement. In selecting electives, students should consult their faculty advisor and carefully consider whether they wish to reinforce or complement their departmental major.

Electives based in the Social Sciences:

- ECON 257 Environmental and Natural Resource Economics
- EN 210 Environment and Society
- EN 247 Computer and Quantitative Methods in Risk Analysis
- EN 250 Technology and Environmental Assessment
- EN 261 Decision Methods for Environmental Management and Policy
- EN 265 Tools for Quantitative Policy Analysis
- EN 282 Management of Environmental Pollutants
- ES 141 Science, Uncertainty and Decisions
- ES 142 Data, Uncertainty and Information
- ES 145 Statistical Methods in Environmental Economics
- ES 157 The Politics of Environmental Issues
- ES 180 Earth Transformed by Human Action
- GEOG 118 Environment and Disaster
- GEOG 126 Political Economy of Resource Management

GEOG 147 Critical Environmental
Situations: Global & Local Perspectives
GEOG 179 International Political Ecology
GEOG 211 African Environments
GEOG 218 Seminar in Physical
Environment and Development
GEOG 224 Economy and Environment
GEOG 226 Environmental Hazards
Theory, Models, Applications
GEOG 230 Conservation Geography
GEOG 254 Transportation, Environment
and the American Dream
GEOG 277 Gender, Environment and
Development
GEOG 280 Urban Ecology: Cities as
Ecosystems
GEOG 284 Environment & Development
in the Middle East & North Africa
GOVT 157 Politics of U.S. Environmental
Issues
GOVT 276 Environmental Law
ID 143 Tropical Deforestation
ID 170 Ecology and Economy in the
Tropics
ID 232 Population, Environment and
Development
MGMT 252 Corporate Environmental
Management
SOC 205 Sociology of the Environment

**Electives based in the Natural and Life
Sciences:**

BIOL 104 Biodiversity
BIOL 105 Evolution
BIOL 204 Watershed Ecology
BIOL 216 Ecology
BIOL 241 Risk Assessment in
Environmental Toxicology
BIOL 246 Cancer, Science and Society
CHEM 080 Perspectives in Environmental
Chemistry
CHEM 142 Environmental Chemistry
EN 115 Hydrology
EN 251 Limits of the Earth
ES 080 Perspectives in Environmental
Chemistry
ES 121 Earth System Science

ES 122 Ecological Systems
ES 143 Biosphere-Atmosphere Interactions
ES 144 Energy and the Campus
ES 211 Forest and Wilderness
GEOG 200 Land Degradation
GEOG 281 Tropical Ecology
PHYS 140 Energy and the Environment

Electives based in the Humanities:

ARTH 144 Modern Landscape Art
ARTH 148 Landscape as Revelation
ARTS 204 Sacred Space
ARTS 162 Exploring the Natural World
CIGP 275 Culture, Consumption and Class
in Local and Global Contexts
ENG 287 Senses of Place
ENG 293 Studies in Landscape
ES 010 Environment and Culture.
GEOG 136 Gender and Environment
GEOG 237 Feminism, Nature and Culture
GEOG 253 New England Landscape
PHIL 205 Eros and Thanatos
PHIL 235 Self and Nature.

6. A 200-level Capstone Experience consisting of an internship, independent research project, research apprenticeship, or off-campus field studies program.

Research apprenticeships and independent research projects are normally sponsored by faculty in one's major department. Internships may be arranged through the internship office, and can be based in community-based organizations (e.g., the Regional Environmental Council or the University Park Partnership), research institutes (e.g., the Marsh Institute), government agencies, or private corporations. Field studies may be arranged through the Bermuda Biological Station, the School for Field Studies, or other suitable organizations.

Special Advising Notes:

1. Economics majors are advised that they may not take both ES 155 and ECON 257 for credit.
2. Many courses in the Environment and Society Concentration are cross-listed in another department or program. ES concentrators are advised to take such courses under their ES designation whenever possible.

ETHICS AND PUBLIC POLICY

Participating Faculty

Judith W. DeCew, Ph.D., *program director; ethics, philosophy of law, social and political philosophy*

Marguerete Arndt, Ph.D., *health policy*

John Blydenburgh, Ph.D., *game theory, policy analysis, public opinion research*

Robert Bradbury, Ph.D., *health policy*

Halina Brown, Ph.D., *risk analysis and management, public health policy*

Brian Cook, Ph.D., *public policy, environmental policy, environmental law*

Patrick G. Derr, Ph.D., *philosophy of science, biomedical ethics, ethical issues in hazards management*

Cynthia Enloe, Ph.D., *women and politics, military policy, ethnic and racial politics*

Eric Gordy, Ph.D., *political sociology*

Susan Hanson, Ph.D., *transportation policy*

Douglas Johnson, Ph.D., *land management policy*

Roger Kasperson, Ph.D., *environmental policy, risk analysis and management*

Deborah M. Merrill, Ph.D., *medical sociology, family, aging*

Mark C. Miller, J.D., Ph.D., *American political institutions, constitutional law*

Attiatt Ott, Ph.D., *health economics, health policy*

Edward Ottensmeyer, Ph.D., *management, business ethics*

Gary E. Overvold, Ph.D., *interdisciplinary studies, cultural history, professional ethics*

Michael Pakaluk, Ph.D., *philosophy of love and friendship*

Frank Puffer, Ph.D., *health economics, health policy*

Robert Ross, Ph.D., *social planning and social policy*

Walter E. Wright, Ph.D., *ethics*

Undergraduate Program

The interdisciplinary Ethics and Public Policy concentration can be taken in conjunction with any major at Clark. This concentration is

particularly recommended for students who intend to pursue professional or career interests in policy-related fields such as law, government, public administration, or health care.

Concentration Requirements

The requirements for a concentration in ethics and public policy are designed to familiarize the student with the basic concepts and methods of both ethical analysis and policy analysis; to introduce the theoretical and methodological problems of both ethical analysis and policy analysis; and to ensure that the student engages in sustained analysis of particular ethical and public policy issues at both an introductory and an advanced level.

At a minimum, the concentration in ethics and public policy requires six courses, distributed in the following manner:

1. Two required courses in ethics

At least one introductory course focused on the basic concepts and methods of ethical analysis. For example:

PHIL 105 Personal Values

PHIL 132 Social and Political Ethics

At least one advanced course focused on theoretical and methodological problems of ethical analysis. For example:

PHIL 220 History of Ethics

PHIL 221 Social and Political Philosophy

PHIL 228 Contemporary Moral Theory

GOVT 286 Advanced Topics in

Contemporary Political Feminist Theories

2. Two required courses in public policy analysis

At least one introductory course focused on the basic concepts and methods of policy analysis. For example:

GOVT 070 Introduction to Comparative Politics

GOVT 107 Research Methods

ECON 126 Public Policy Toward Business

GOVT 154 The Politics of Public Policy

GOVT 155 Roots of Political Thought

ENV 175 Science, Decision Making, and Uncertainty

At least one advanced course focused on theoretical and methodological problems of policy analysis. For example:

GOVT 202 Applications of Game Theory

ES 212 Environmental Policy and Management

GOVT 213 Policy Analysis

ECON 215 Government Finance: Budget Policy in a Comparative Setting

ENV 226 Environmental Hazards

SOC 243 Political Sociology

SOC 246 Social Planning and Social Policy

ENV 250 Technology Assessment

GOVT 253 Judicial Politics

GOVT 255 U.S. Congress

ENV 261 Decision Analysis for Environmental Management

ENV 265 Tools for Quantitative Policy Analysis

GOVT 281 Politics of Public Management

3. Two required courses on applications and problems

At least one introductory course focused on particular ethical and public policy issues.

For example:

GEOG 105 The Keeping of Animals: Patterns of Use and Abuse

ID 108 World Population

ID 125 Development Problems

PHIL 130 Medical Ethics

ES 123 Environmental Ethics

PHIL 133 Business Ethics

GOVT 147 Normative World Orders

SOC 150 Class, Status and Power

EDUC 155 Education and Social Policy

GOVT 157 The Politics of Environmental Issues

SOC 180 Aging and Society

ENV 182 People, Politics and Pollution

At least one advanced course devoted to the intensive analysis of particular ethical and public policy issues. For example:

ENV 210 Environment and Society

ECON 216 Tax Systems and Policies

GOVT 221 Urban Policy and Internships

ECON 225 Health Policy

ENV 226 Environmental Hazards: Theory, Models & Applications

ID 232 Population, Environment, and Development

SOC 241 Sociology of Medicine

GOVT 250 National Security Policy Making in the U.S.

ENV 251 Limits of Earth

GEOG 254 Urban Transportation: Problems and Prospects

GEOG 258 Utopian Vision, Urban Reality

MGMT 262 Business Ethics

SOC 265 Social Movements: The Quest for Justice

PHIL 270 Philosophy of Law

EPP 273 Advanced Issues in Medical Ethics

ENV 282 Management of Environmental Pollutants

Directed Readings, Individual Research

Students who are motivated to undertake significant independent research should consult the individual faculty member with whom they wish to work regarding opportunities for Directed Research or Directed Readings.

Internships

Participating faculty sponsor a variety of undergraduate internship experiences, often with policy-making professionals or agencies with whom they have a consulting or research relationship. Students interested in these opportunities should inquire through the internship office.

Courses

All courses that count toward the concentration will be cross-listed under the EPP designation. For more details about a specific course, see the catalog listing under the participating department. No more than two of the courses can also be counted for the student's major or minor requirements, or for another concentration.

HOLOCAUST AND GENOCIDE STUDIES PROGRAM

Core Faculty

Deboráh Dwork, Ph.D., *Rose Professor of Holocaust Studies and Modern Jewish History and Culture: Modern European history, history of the Holocaust*

Everett Fox, Ph.D., *the Allen M. Glick chair in Judaic and Biblical Studies: Hebrew Bible, Midrash, Jewish ritual and folklore, classical Jewish thought*

Robert Gellately, Ph.D., *Strassler Family Chair for the Study of Holocaust History: modern German history, modern Central European history, history of the Holocaust*

Walter Schatzberg, Ph.D.: *Age of Goethe, Weimar culture, German expressionism in literature and the arts, German cinema, relations between literature and science*

Valerie Sperling, Ph.D.: *Post-Soviet and East European politics, comparative politics, social movements and collective action, women's studies*

Shelly Tenenbaum, Ph.D., *program director: sociology of American Jewry, race and ethnicity, gender*

Participating Faculty

Paul F. Burke, Jr., Ph.D.: *Greek and Latin language and literature, classical mythology, classical art and archaeology, ancient history*

Gerald R. Castonguay, Ph.D.: *musicology, medieval through 19th century music and cultural history*

Eric D.Gordy, Ph.D.: *sociological theory, sociology of culture, media and communication, political and historical sociology, Balkan societies*

Hartmut Kaiser, Ph.D.: *German language and literature, German romanticism, the fairy tale, relations between music and literature*

Dorothy Kaufmann, Ph.D.: *French literature, feminism and women writers, autobiography, French and Francophone cultural studies*

Paul Lucas, Ph.D.: *England and France before 1800; European intellectual history, 1650-1945*

Undergraduate Program

The Holocaust and acts of genocide are studied to enhance our understanding of the society from which we came, the society in which we live, and the society to which we currently are giving shape. By studying the Holocaust and genocide, we learn about ethnicity, geography, and genocide; about collusion and resistance; about the hot violence of mass murder and the cold violence of the modern, bureaucratic machinery of death; and about suffering and adaptation to suffering. We learn how societies disintegrated step by step, and how ordinary men, women, and children both participated in and were affected by this disintegration. We learn, in short, a tremendous amount about what we need to know now to help us make the world a better place, wherever we might be.

The undergraduate concentration in Holocaust and Genocide Studies provides students with solid grounding in the history of the Holocaust and other genocides. Students also take a series of courses in a variety of disciplines to ensure a critical, analytical, and sophisticated understanding of the various facets of these atrocities. The undergraduate program of study emphasizes history while encompassing sociology, government, literature, film, and music.

Concentration Requirements

The Holocaust and Genocide Studies concentration may be pursued in conjunction with any major. Students are required to take seven courses that include:

SOC 130 Genocide

HIST 175 The History of the Holocaust:

Part 1 or HIST 284 The Holocaust and Its Aftermath

GOVT 214 Mass Murder and Genocide Under Communism

Two courses from section A, one of which must be in Jewish Studies

One course from section B

A capstone course

The two courses from Section A and the one course from Section B must be in at least two different disciplines. At least two of the

total seven courses must be at the 200-level. The program faculty members will serve as advisors to students, providing guidance in selecting courses and developing a capstone experience.

Section A

Two out of this list are required, one of which must be in Jewish Studies.

- JS 130 Suffering and Evil in Jewish Tradition
- HIST 173 History of Racial Thought
- JS 174 The Jewish Experience
- GER 188 The Culture of the Weimar Republic in Literature, Film, and the Arts
- JS 212 Eastern European Jewish History and Culture Between the Two World Wars
- HIST 253 Europe in the Age of Extremes
- HIST 259 Germany to 1933
- JS 262 Jews and Christians in the Ancient World
- JS 276 Modern Jewish History and Thought

Section B

One of the following courses is required

- GER 150 New German Cinema
- HIST 176 The Holocaust in Historical Perspective
- GER 192 Richard Wagner, the Jews and the Nazis
- SCRN 205 Holocaust on Film
- CMLT 209 Literary Responses to the Holocaust
- FREN 225 Literature and Film of German-Occupied France
- GOVT 230 The Armenian Genocide
- GOVT 240 Human Rights and International Politics
- SOC 242 Human Rights and Transitional Justice
- HIST 260 Rescue and Resistance
- JS 261 Jewish Children in Nazi Europe
- HIST 262 Science, Medicine, Race in Modern Europe
- HIST 263 Nazi Terror in Germany and Europe
- HIST 264 Intimacy and Dictatorship

HIST 268 Holocaust Issues and Controversies

HIST 270 Homefronts in World War II

HIST 273 Life Under Occupation

HIST 274 The Fate of the Shtetl During the Holocaust

Capstone Courses

The capstone requirement may be fulfilled through a directed research project or a seminar. Examples of seminars that fulfill the capstone requirement are HIST 260 Rescue and Resistance, JS 261 Jewish Children in Nazi Europe, HIST 264 Intimacy and Dictatorship, HIST 270 Homefronts in World War II, and HIST 273 Life Under Occupation.

JEWISH STUDIES

Program Faculty

Debórah Dwork, Ph.D.: *Modern European history, history of the Holocaust*

Everett Fox, Ph.D., *program director: Hebrew Bible, Midrash, Jewish ritual and folklore, classical Jewish thought*

Shelly Tenenbaum, Ph.D.: *sociology of American Jewry, race/ethnicity, women in Jewish culture*

Adjunct Faculty

Paul F. Burke, Jr., Ph.D.: *Greek and Latin language and literature, classical mythology, classical art and archaeology, ancient history*

George M. Lane, M.A.: *U.S. foreign policy, arms control, Middle East politics, U.S.-European relations*

Visiting Faculty

Tzilla Barone, B.A.: *Hebrew language and literature*

Undergraduate Program

Jewish Studies at Clark are designed to introduce the student to the major historical and religious trends in Jewish civilization since its inception in antiquity. The courses reflect the broad range of developments both encountered and fostered by the Jewish people: their con-

tact with other world civilizations, their classical literature, their social and religious institutions, and their interaction with the modern world. In these courses, Jews and Judaism are studied both in their own internal context and as paradigms for wider trends in history and religion.

Concentration Requirements

All students must take JS 174 The Jewish Experience, a survey of Jewish history and thought. In addition to JS 174 students must take six courses of which at least two must be in the Classical area and at least two in the Modern area. One of the six courses must be an integrating capstone project (internship, independent study, or advanced seminar with the approval of the program director). Two courses in Hebrew language may also count toward concentration. It should also be noted that courses in other departments cited below are cross-listed.

CLASSICAL

JS 117 Introduction to the Hebrew Bible I: Narrative and Law

JS 118 Introduction to the Hebrew Bible II: Prophecy and Poetry

JS 121 Laws and Legends, Maxims and Mystical Tales

JS 123 The Midrashic Tradition

JS 130 Suffering and Evil in Jewish Tradition

JS 150 Jerusalem in History and Imagination

JS 262 Jews and Christians in the Ancient World

JS 267 The Religious Experience in the Ancient World

MODERN

JS 203 American Jewish Life

JS 204 History of the Holocaust

JS 210 Arab-Israeli Conflict

JS 245 U.S. Foreign Policy-Middle East

JS 258 Women in Jewish Culture (also Classical)

JS 276 Modern Jewish History and Thought

JS 277 History of Zionism and Israel

Courses

Hebrew Language and Literature Courses

101-102 ELEMENTARY HEBREW/LECTURE, DISCUSSION

See Hebrew 101-102. Ms. Barone/Offered every year

103 INTERMEDIATE HEBREW/LECTURE, DISCUSSION

See Hebrew 103. Ms. Barone/Offered every year

104 INTERMEDIATE/ADVANCE HEBREW/LECTURE, DISCUSSION

See Hebrew 104. Ms. Barone/Offered every year

105 ADVANCED HEBREW/LECTURE, DISCUSSION

See Hebrew 105. Ms. Barone/Offered every year

299 SEC. 6 SPECIAL TOPICS IN HEBREW

See Hebrew 299.6. Ms. Barone/Offered every year

Jewish Studies Courses

117 INTRODUCTION TO THE HEBREW BIBLE I: NARRATIVE AND LAW/LECTURE, DISCUSSION

A close reading (in English) of the first half of the Hebrew Bible, Genesis through Kings II. Issues to be considered include: the rise of Israel against the background of the Ancient Near East, myth and history in the ancient world, biblical storytelling as an artistic and ideological form, and the world view behind biblical laws and rituals. Also discussed is the process by which the Bible took shape, in relation to ancient Israel's self-understanding. The tools of recent research in comparative religion, anthropology, archaeology, and literature are utilized. Emphasizes the contribution of this literature to Western thought. Mr. Fox/Offered every year

118 INTRODUCTION TO THE HEBREW BIBLE II: PROPHECY AND POETRY/LECTURE, DISCUSSION

A close reading (in English) of the poetic portions of the Hebrew Bible, from Isaiah through the Writings. The prophetic revolution in Israel is evaluated: its roots its impact on its

own society as well as on later social and cultural criticism in the West. The artistry of biblical poetry is analyzed, along with the themes of piety, despair, resignation, and eroticism that are found in such books as the Psalms and the Song of Songs. Finally, books of a more philosophical bent (Ecclesiastes, Job), which question the earlier assumptions of biblical faith, are read. As in Jewish Studies 117, emphasis is placed in the influence of the Bible on later thinking in the West. Mr. Fox/Offered every year

121 LAWS AND LEGENDS, MAXIMS AND MYSTICAL TALES/LECTURE, DISCUSSION

Introduces (in English) major texts of post-Biblical Judaism. Beginning with the Roman period, the texts cover such diverse areas as folklore, ethics, legal rules, and mysticism. The sources involve ancient answers to questions of everyday living, physical and spiritual survival, and celebration; we also trace the reformulation of such questions down to the eve of the modern period. Stresses how the texts work, centering on the role of commentary as a classic form of Jewish discourse and on an active style of group learning. Mr. Fox/Offered every other year

123 THE MIDRASHIC TRADITION/LECTURE, DISCUSSION

An English-language study of Midrashic literature, the primary Jewish literary expression after the Bible. Written down mainly during the Roman period, the texts comprise independent legends about supernatural beings; writings about biblical characters (filling in gaps in the biblical stories); traditions about the lives of the ancient rabbis; and wide-ranging statements about worldly wisdom, ethical values, and political reality. Sources are ready with an eye toward what they reveal about ancient Jewish society and in the light of recent work in folklore studies. A final unit considers later forms of Midrash, such as Hasidic and contemporary variations. Mr. Fox/Offered every other year

130 SUFFERING AND EVIL IN JEWISH TRADITION/LECTURE, DISCUSSION

A central problem in Western religious thought is theodicy: how to explain the existence of suffering and evil in a world ruled by a supposedly benevolent God. Examines a variety of Jewish sources on the problem, which propose a wide variety of answers. Central are the biblical book of Job and its interpretations through the centuries; at the other end of history, responses to the Holocaust are considered. Mr. Fox/Offered every other year

150 JERUSALEM IN HISTORY AND IMAGINATION/LECTURE, DISCUSSION

Travels through the complex history of Jerusalem, a city holy to Jews, Christians, and Muslims, from the Bronze Age to the present. The governing powers and cultures centered in the city will be studied, from Israelites to Persians, Greeks, Romans, Byzantines, Umayyad Arabs, Crusaders, Ottoman Turks, European colonials, and present-day Israelis and Palestinians. Their political and religious visions of the city, and how these have played out in conquest, governance, and architecture, will be discussed. Also considered will be the universal concept of sacred space, as demonstrated by Jerusalem. We will move from the Jerusalem of daily reality—including that of today—to the Jerusalem of the mind, suffused with the deeds of Herod and Isaiah, Herod and Jesus, Mohammed and Saladin; a city envisioned by millions as the site of future redemption for humanity. Mr. Fox/Offered periodically

174 THE JEWISH EXPERIENCE/LECTURE, DISCUSSION

A survey of the history of the Jewish community and the development of Judaism from the era of Alexander the Great (c. 325 B.C.E.) to the present. Examines the major political, religious, social, and economic trends of each period as they affected the evolving Jewish community and the development of Judaism. Emphasizes elements of change and continuity

as well as the interaction of the Jewish community with the larger culture/community.

Mr. Fox/Offered every year

203 AMERICAN JEWISH LIFE

See Sociology 203. Ms. Tenenbaum/Offered every other year

204 HISTORY OF THE HOLOCAUST TO 1933

See History 175. Ms. Dwork/Offered every year

212 EASTERN EUROPEAN JEWISH HISTORY AND CULTURE BETWEEN THE TWO WORLD WARS

See Holocaust Studies 212. Staff/Offered every year

245 U.S. FOREIGN POLICY-MIDDLE EAST

See Government 245. Mr. Lane/Offered every year

258 WOMEN IN JEWISH CULTURE

See Sociology 258. Ms. Tenenbaum/Offered every other year

262 JEWS AND CHRISTIANS IN THE ANCIENT WORLD

See Classics 262. Mr. Burke/Offered every other year

267 THE RELIGIOUS EXPERIENCE IN THE ANCIENT WORLD

See Ancient Civilizations 267. Mr. Burke/Offered every other year

276 MODERN JEWISH HISTORY AND THOUGHT

See History 276. Staff/Offered every other year

277 HISTORY OF ZIONISM AND ISRAEL

Examines the rise and development of the Zionist idea, Zionist parties, and politics and diplomacy in relation to Jewish history and international affairs from 1880 until 1948. The second part of the course analyzes Israel's domestic and foreign policies from 1948 to the present. Special attention is given to social and political trends in Israeli society. Staff/Offered periodically

LAW AND SOCIETY

Core Faculty Advisors

Mark C. Miller, J.D., Ph.D., *program director: judicial behavior, lawyers and American politics, U.S. constitutional law, comparative courts and law*

Judith W. DeCew, Ph.D.: *philosophy of law, social and political philosophy, privacy and the law*

Patricia M. Ewick, Ph.D.: *sociology of law, deviance and social control*

Undergraduate Program

The interdisciplinary Law and Society concentration explores questions about the impact and effects of law, legal institutions, and legal actors on society from a variety of perspectives. It also explores the identification and analysis of legal arguments in a variety of contexts. Some of the courses also help the students develop their oral advocacy skills. The concentration can be taken in conjunction with any major at Clark.

Concentration Requirements

1. Students must take a minimum of six courses to fulfill the concentration.
2. The six courses must come from at least three different departments.
3. At least two of the courses must be at the 200 level.
4. One of the six courses must be a gateway course, which should be taken as early as possible in the student's academic program:
Govt 050 Introduction to American Government
5. One of the six courses must be a capstone experience (a seminar, an internship, or a directed research project):
Phil 270 - Seminar: Philosophy of Law
Govt 291 - Seminar: Lawyers and American Politics
Govt 293 - Seminar: Constitutional Democracy
Legal Internships in a variety of academic departments
Directed Research or Special Projects in a variety of academic departments

6. No more than two of the courses can also be counted for the student's major or minor requirements, or for another concentration.

Cross-listing of Courses

All courses in the concentration are cross-listed under the LAS designation. For more details about a specific course, see the catalog listing under the participating home department.

Courses

Gateway course:

Govt 050 - Introduction to American Government

General courses:

IDND 038 - Trial Advocacy
IDND 039 - Advanced Trial Advocacy
Phil 107 - Logic and Legal Analysis
Phil 108 - Privacy in Law and Ethics
Phil 132 - Social and Political Ethics
Hist 140 - England to 1688
Econ 157 - Economics of Natural Resources
Mgmt 178 - Business Law
Eng 196/Com 196 - Oral Advocacy
Hist 201 - Era of the American Revolution
Hist 202 - Early American Republic
Govt 203 - Justice and Gender
Hist 214 - American Civil War
Hist 217 - Reconstruction: America after the Civil War
Phil 221 - Social and Political Philosophy
Hist 223 - Civil Rights Movement
Soc 244 - Human Rights and Transitional Justice
Govt 253 - U.S. Judicial Politics
Econ 257 (LAS 256) - Environmental and Natural Resource Economics
Govt 257 - Comparative Courts and Law
Eng 257/Com 257 (LAS 258) - Language at Issue
Soc 262 - Law and Society
Soc 263 - Deviance and Social Control
Govt 272/Hist 239 - Con Law: Civil Liberties
Govt 273/Hist 240 - Con Law: Government Powers
Govt 274 - The Supreme Court and American Society

Govt 276/ES 276 - Environmental Law
Govt 297 - Advanced Topics: Voices of American Democracy

Capstone courses:

Phil 270 - Philosophy of Law
Govt 291 - Lawyers and American Politics
Govt 293 - Constitutional Democracy

Directed Readings, Individual Research

Students who are motivated to undertake significant independent research should consult the individual faculty member with whom they wish to work regarding opportunities for Directed Research or Special Projects.

Internships

Participating faculty sponsor a variety of undergraduate legal and law-related internship experiences. Students interested in these opportunities should inquire with the internship coordinator in the Office of Career Services.

PEACE STUDIES

Program Faculty

Joseph H. deRivera, Ph.D. *program director: emotions, social psychology and the development of a culture of peace*

Patrick G. Derr, Ph.D.: *environmental and medical ethics, hazards management, philosophy of science*

Deboráh Dwork, Ph.D: *Holocaust studies, history of genocide*

Cynthia Enloe, Ph.D.: *women and politics, militarization, comparative politics*

William Fisher, Ph.D.: *social movements; the politics of development; transnational advocacy networks; state-ethnic conflicts*

Eric Gordy, Ph.D.: *cosmopolitanism and cultural conflict within societies*

Janette Greenwood, Ph.D: *American social history*

Laura Hammond, Ph.D: *humanitarian assistance in conflict, post-conflict peace building, refugees and forced migration, famine and food security*

George Lane, M.A.: *U.S. foreign policy, arms control, Middle East history and politics*

Douglas J. Little, Ph.D.: *U.S. diplomatic history, America since 1900, modern Latin America, Middle East*

Dianne Rocheleau, Ph.D.: *gender, class, race and ethnicity in conflicts over the environment and development; social movements to recreate the commons on local, regional, and global scales*

Robert J. Ross, Ph.D.: *urban political economy, political sociology, social movements*

Valerie Sperling, Ph.D.: *women's movements, nonviolent collective action, state-society relations*

Kristen Williams, Ph.D.: *international relations, arms control and international security, nonviolent responses to nationalist and ethnic conflicts*

Walter E. Wright, Ph.D.: *ethics, philosophy of religion*

Program and Concentration

The Peace Studies Program is concerned with analyzing alternative ways that may be used to transform individual behavior, national policy, and human institutions in order to promote peace and justice in the world. The program promotes discussion and study on issues of conflict and its management, within the lives of individuals, societies, and the world at large. It sponsors research on meditation, mediation, negotiation, and ways to reduce violence, build diverse communities, and use nonviolent action to defend human rights and promote justice.

Undergraduates may concentrate in peace studies to complement any major. Students may also design a major in peace studies via the University's self-designed major. The concentration draws together the knowledge of several disciplines in the context of the search for peace, while enhancing students' critical thinking skills and awareness of the connections between local and global issues.

Departments and programs represented in peace studies include economics, government, history, international development, philosophy, psychology, and sociology.

Course work, research, and internships enable students to apply their theoretical understanding of the issues of peace to practical situations. The concentrator needs to have an active understanding of the relationship between the three spheres of peace: Personal, Societal, and Global. These are interlocked, each influencing the others in cyclical patterns. Conflicts often involve links between the hearts of individuals, the structures of societies, and global competition and cooperation. Hence, the concentrator should be engaged in understanding how personal development and societal and global structure can transform conflicts. Students with a concentration in peace studies are prepared to enter careers and graduate study in such fields as public policy, international development, labor relations, environment and ecology, and international relations. They are prepared to take an active role in shaping constructive policies in the public sector and civil society.

The Peace Studies Office provides information on internships, jobs, and careers; a library; and a computer link to international conferences and bulletin boards.

Requirements

Students who concentrate in peace studies take 101 Introduction to Peace Studies, and at least one course from each of three clusters of courses dealing with issues of negotiation and political influence, nonviolent action, and strength and conflict. Finally, students select an elective from any of the three clusters and take either an internship, or a directed readings, research, or seminar that involves at least one of the skills of peacemaking and enables the student to examine personal transformation. Thus, six courses are required for the concentration. (At least two of these should be at the 200 level; two may be from the student's major.)

Courses

The following is a list of Clark's peace studies offerings. Students may petition the Peace Studies Committee to receive concentration credit for courses other than those listed below,

including courses that are available through the consortium. More information may be obtained from the Peace Studies Office, 201 Jonas Clark. (508) 793-7663.

101 AN INTRODUCTION TO PEACE STUDIES AND THE PSYCHOLOGY OF PEACE

Can we manage the conflict in our personal life, our society, our world, so it results in development and justice rather than oppression and destruction? We consider four paths towards peace: Strength, negotiation, justice through nonviolent and political action, and personal transformation. Students are asked to develop their own stance towards achieving peace, to act on the basis of that stance, and to report what they discover. Mr. deRivera/
Offered every year

Nonviolent Action Courses

131 LOCAL ACTION, GLOBAL CHANGE

See ID 131

177 TRANSITIONS TO DEMOCRACY

See GOV 177

233 THE CIVIL RIGHTS MOVEMENT

See HIST 223

251 SOCIAL MOVEMENTS AND INTEREST GROUPS

See GOV 251

253 SOCIAL MOVEMENTS, GLOBALIZATION, AND THE STATE

See ID 253

265 SOCIAL MOVEMENTS

See SOC 265

Negotiation and Political Influence Courses

266 PRINCIPLES OF NEGOTIATION AND MEDIATION: AN OVERVIEW OF CONFLICT RESOLUTION APPROACHES

See ID 266

366 PRINCIPLES OF INTER-GROUP NEGOTIATION

See ID 366

154 THE POLITICS OF PUBLIC POLICY IN THE U.S.

See GOV 154

205 CAMPAIGNS AND ELECTIONS

See GOV 205

243 POLITICAL SOCIOLOGY

See SOC 243

251 SOCIAL MOVEMENTS AND INTEREST GROUPS

See GOV 251

255 THE POLITICS OF CONGRESS

See GOV 255

Strength and Conflict

117 REVOLUTION AND POLITICAL VIOLENCE

See GOV 117

129 GENOCIDE

See SOC 130

210 PALESTINE, ISRAEL AND THE ARAB CONFLICT

See GOV 210

230 THE ARMENIAN GENOCIDE

See HIST 230

245 U.S. FOREIGN POLICY-MIDDLE EAST

See GOV 245

250 NATIONAL SECURITY

See GOV 250

259 WAR, REVOLUTION, AND SOCIETY IN MODERN GERMANY

See HIST 259

260 RESCUE AND RESISTANCE DURING THE HOLOCAUST

See HIST 260

261 WOMEN AND MILITARISM

See GOV 261

289 ADVANCED TOPICS IN INTERNATIONAL RELATIONS

See HIST 287

Internships, Directed Readings, Research and Capstone Courses

PSTD 246 PSYCHOLOGY OF PEACE-MAKING

PSTD 290 SPECIAL TOPICS IN PEACE STUDIES

PSTD 298 DIRECTED READINGS IN PEACE STUDIES

PSTD 299 PEACE STUDIES INTERNSHIP

RACE AND ETHNIC RELATIONS

Principal Advisors

Beverly Grier, Ph.D., *coordinator: African politics, African-American politics, child labor, land and politics*

Janette Greenwood, Ph.D.: *American social and African-American history, history of the South*

Shelly Tenenbaum, Ph.D.: *Jewish studies, race/ethnicity, social stratification*

Participating Faculty

Maria Acosta Cruz, Ph.D.: *Spanish-American literature, Baroque literature, postmodern literature, comparative literature, contemporary literary theory*

Parminder Bhachu, Ph.D.: *urban anthropology, diaspora cultures, immigration and migrant identities, ethnicities, nationalism, gender*

Paul F. Burke, Ph.D.: *ancient history*

Martyn J. Bowden, Ph.D.: *cultural humanistic and historical/urban/social geography*

Carol C. D'Lugo, Ph.D.: *Spanish and Spanish-American Literature, literary theory*

Deboráh Dwork, Ph.D.: *modern European history, history of the Holocaust*

Cynthia H. Enloe, Ph.D.: *women and politics, militarization, Asian politics, British politics, ethnic and racial politics*

William Ferguson, Ph.D.: *Spanish Golden-Age literature, 20th-century Hispanic literature*

Everett Fox, Ph.D.: *Hebrew Bible, Midrash, Jewish ritual and folklore, classical Jewish thought*

Susan Hanson, Ph.D.: *urban/social geography transportation, research methods, geography and gender*

Fern L. Johnson, Ph.D.: *sociolinguistics, feminist linguistics, communication*

Dorothy Kaufmann, Ph.D.: *French literature, feminism and women writers, autobiography, French and francophone cultural studies*

Constance M. Montross, Ph.D.: *Spanish-American literature*

Winston Napier, Ph.D.: *African-American literature, critical theory*

Robert J.S. Ross, Ph.D.: *urban studies, political sociology, political economy, social policy*

Undergraduate Program

Race and Ethnic Relations is an interdisciplinary concentration that enables students to examine relations within and between racial and ethnic groups primarily in the United States. The concentration brings together a wide range of courses in the humanities and social sciences that allow students to compare experiences across racial and ethnic groups. The concentration also allows students to compare the U.S. experience with that of other racially and ethnically diverse countries in Europe, the Middle East, Africa, and Asia, past and present.

Requirements

Students fulfilling the Race and Ethnic Relations Concentration are required to take a minimum of six courses. Five of the six courses must be U.S.-based courses; one must focus on a country or region outside the U.S.

1. One course must be History 016 Race and Ethnicity in American History, a humanities course. This course serves as the introductory course for the concentration.
2. Two additional courses in the humanities (classics, English, foreign languages and literature, history). One of these courses must be a literature course.
3. Three courses in the social sciences (cultural and global processes, geography, government, sociology).
4. A minimum of three courses must be at the 200-level. One course must be an advanced seminar approved by the student's advisor. The advanced seminar serves as the capstone experience.
5. One course whose focus is a country or region other than the U.S.

Courses

Introductory Course

016 RACE AND ETHNICITY IN AMERICAN HISTORY

See HIST 016. Ms. Greenwood/Offered every year

Humanities Courses (Choose a minimum of two courses)

021 VOICES FROM SLAVERY

See HIST 021. Ms. Greenwood/Offered periodically

113 URBAN LANDSCAPES: THE CITY IN AMERICAN HISTORY FROM COLONIAL TO MODERN TIMES

See HIST 113. Ms. Richter/Offered every year

117 FIELDWORK IN THE HISPANIC COMMUNITY

See SPAN 117. Ms. Montross/Offered every semester

127 CROSSING BOUNDARIES

See Comp. Lit. 125. Ms. Kaufmann/Offered periodically

182 AFRICAN-AMERICAN LITERATURE I

See ENGL 182. Mr. Napier/Offered every year

183 AFRICAN-AMERICAN LITERATURE II

See ENGL 183. Mr. Napier/Offered every year

214 THE AMERICAN CIVIL WAR

See HIST 214. Mr. McCoy/Offered every other year

215 LANGUAGE AND CULTURE IN THE U.S.

See English 215. Ms. Johnson/Offered every year

217 RECONSTRUCTION: AMERICA AFTER THE CIVIL WAR, 1865-1877/SEMINAR

HIST 217. Ms. Greenwood/Offered periodically

220 COMMUNITY HISTORY/RESEARCH SEMINAR

See HIST 220. Ms. Greenwood/Offered periodically

221 FROM SLAVERY TO FREEDOM

See HIST 221. Ms. Greenwood/Offered every other year

222 HISTORY OF THE SOUTH

See HIST 222. Ms. Greenwood/Offered every other year

223 HISTORY OF THE CIVIL RIGHTS MOVEMENT

See HIST 223. Ms. Greenwood/Offered every other year

277 RACE AND GENDER AFRICAN-AMERICAN LITERARY THEORY

See ENGL 187. Mr. Napier/Offered every year

291 HARLEM RENAISSANCE SEMINAR

See ENGL 291. Mr. Napier/Offered periodically

Social Science Courses (Choose a minimum of three courses)

125 CITIES AND SUBURBS

See SOC 125. Mr. Ross/Offered every year

142 CITIES AND CULTURE: THE AMERICAN CITY

See GEOG 142. Mr. Bowden/Offered every year

170 DIVIDED CITIES, CONNECTED LIVES

See GEOG 170. Ms. Hanson/Offered every other year

200 CLASS, STATUS AND POWER

See SOC 200. Mr. London, Mr. Ross, Ms. Tenenbaum/Offered every year

203 AMERICAN JEWISH LIFE

See SOC 203. Ms. Tenenbaum/Offered every other year

224 AFRICAN-AMERICAN POLITICS

See GOVT 224. Ms. Grier/Offered every year

225 SEMINAR IN THE HISTORY OF AFRICAN-AMERICAN WOMEN

See GOVT 225. Ms. Grier/Offered every year

252 RACE AND AMERICAN SOCIETY

See SOC 252. Ms. Tenenbaum/Offered every year

285 POVERTY/SEMINAR

See SOC 246. Mr. Ross/Offered every other year

Courses on Race and Ethnicity Outside the U.S. (Choose a minimum of one course)

103 AFRICA AND THE WORLD

See HIST 103. Ms. Grier/Offered every year

120 INTRODUCTION TO SOCIAL ANTHROPOLOGY

See ID 120. Staff/Offered every year

173 HISTORY OF RACIAL THOUGHT IN MODERN EUROPE

See HIST 173. Mr. Gellately. Offered every year

178 SOUTH AFRICA: HISTORY AND CONTEMPORARY POLITICS

See GOVT 178. Ms. Grier/Offered every year

210 PALESTINE, ISRAEL, AND THE ISRAEL-ARAB CONFLICT

See GOVT 210. Staff/Offered periodically

228 COMPARATIVE POLITICS OF RACE, ETHNICITY, AND GENDER

See GOVT 228. Ms. Enloe/Offered every other year

230 ARMENIAN GENOCIDE

See GOVT 230. Staff/Offered periodically

232 CONVERGING CULTURES IN THE AGE OF DISCOVERY/SEMINAR

See ARTH 232. Mr. Bailey/Offered periodically

239 HISPANIC-CARIBBEAN FICTION

See SPAN 239. Ms. Acosta-Cruz/Offered periodically

245 HISPANIC-AMERICAN SHORT STORY

See SPAN 245. Mr. Ferguson, Ms. D'Lugo/Offered periodically

260 ROOTS AND ROUTES: IMMIGRANTS, DIASPORAS AND TRAVEL

See SOC 260. Ms. Bhachu/Offered every other year

262 JEWS AND CHRISTIANS IN THE ANCIENT WORLD

See ANC CIV 262. Mr. Burke/Offered every other year

284 THE HOLOCAUST AND ITS AFTERMATH

See HIST 284. Ms. Dwork/Offered every year

Independent Study Courses

299 SEC. 1 DIRECTED READINGS

Staff/Offered every year

299 SEC. 5 SPECIAL PROJECTS

Staff/Offered every year

299 SEC. 9 INTERNSHIP

Staff/Offered every year

URBAN DEVELOPMENT AND SOCIAL CHANGE

Core Faculty Advisors

Sharon P. Krefetz, *Government, program director: U.S. urban politics, suburban politics, women and politics, housing policy*

Susan Hanson, *Geography: urban/social geography, transportation, research methods, geography and gender*

Amy Richter, *History: U.S. urban history, U.S. women's history*

Robert J.S. Ross, *Sociology: urban studies, political sociology, political economy, social policy*

Participating Faculty

Martyn Bowden, *Geography: cultural humanistic and historical/urban/social geography*

John Brown, *Economics: economic history, European economy*

Thomas Del Prete, *Education: teacher education, professional development schools, building learning communities, spirituality and education*

Jacqueline Geoghegan, *Economics: environmental economics, econometrics.*

Janette Greenwood, *History: American social history, African-American history, and history of the South*

Bruce London, *Sociology: environment and society, community, sociology of the Third World, social demography*

James McHale, *Psychology: family theory and measurement, community psychology and prevention*

Sarah Michaels, *Education: relationships among language, discourse, culture, and schooling; discourse analysis relating to classroom life and learning; teacher research*

Andrew Merrifield, *Geography: political theory, urban geography*

Heather Roberts, *English: American literature, popular culture, gender studies*

Dianne Rocheleau, *Geography: political ecology; gender; forestry/agriculture/land use; culture/power/environment/development*

Dennis Wolf, *Education: learning in the arts and humanities, access to opportunity, community and culture-based learning*

Undergraduate Program

Urbanization has been one of the most powerful processes defining American life in the 20th century. More than three-quarters of the US population is currently classified as urban, suggesting that in many ways understanding contemporary America requires understanding cities—the broad patterns and notable variations in their growth, decline, and, in some cases, revitalization. The Urban Development and Social Change (UDSC) concentration provides students majoring in any field with a structured program of study that enables them to understand the historical, social, economic, and political factors that have shaped U.S. cities and how cities have, in turn, affected the lives of their inhabitants.

The study of Urban Development and Social Change is made all the more significant since more than half of the world's population will soon be living in cities, and urbanization will undoubtedly be one of the key forces shaping life in the 21st century.

Students in the UDSC Concentration study the key concepts and methodological tools used to explore and analyze urban phenomena, focusing primarily on cities in the U.S. Students may also choose to take a course that examines urbanization in other parts of the world. Proceeding from an introductory course through intermediate and advanced courses offered in several different departments, students then apply these concepts and methods in their capstone experience. The capstone can be either a research project or an internship, conducted under the supervision of one of the UDSC concentration's participating faculty members or done as part of an urban research or internship seminar.

For their capstone projects, students in the concentration are encouraged to take advantage of the unparalleled opportunities for field research and applied learning that are offered by Clark's location in the center of Worcester. Like many medium-sized cities in the Northeast and Midwest, Worcester has experienced significant social, economic, and political changes over the

past few decades, which make it a superb laboratory for learning. Moreover, Clark's involvement in the University Park Partnership (UPP)—a partnership the University forged with neighborhood groups, city and state government agencies, and businesses—provides unique opportunities for students to contribute to innovative efforts to improve education, housing, and economic and social conditions in our inner city neighborhood.

Requirements

1. Students must take a minimum of seven courses in the concentration, including the capstone project.
2. The seven courses must come from three or more different departments.
3. One of these courses, which should be taken at the outset, must be an introductory course, selected from Group A.
4. One of these courses must be a research methods course, which should be taken as early as possible, selected from Group B.
5. At least three additional courses focusing on U.S. cities must be taken from Group C. At least two of these courses must be at the 200 level.
6. One of the seven courses may be selected from Group D and have a non-U.S., international, or comparative focus.
7. One of the seven courses must include a culminating capstone experience, consisting of a research or internship project, done either as part of an Urban Research or Internship Seminar or as a Directed Project supervised by a "core faculty advisor" or a "participating faculty member" in the UDSC concentration.
8. No more than two courses in the concentration can also be used to satisfy the requirements of a major, minor, or other concentration (excluding courses required for the major).

Students pursuing the concentration will receive advice from one of the Core Faculty Advisors on selecting appropriate courses for the concentration.

Courses

Group A: Introductory Courses

- GEOG 170 Divided Cities/Connected Lives, S. Hanson
- GOVT 220 Urban Politics: People, Power and Conflict in U.S. Cities, S. Krefetz
- HIST 113 U.S. Urban History and Landscapes, A. Richter
- SOC 125 Cities and Suburbs, R. Ross

Group B: Research Methods Courses

- GEOG 141 Research Methods in Geography, staff
- GOVT 107 Research Methods in Politics, J. Blydenburgh, B. Cook, S. Krefetz
- SOC 170 The Social Research Process, P. Ewick, D. Merrill

Group C: U.S. Urban Courses

- ARTS 258: A Sense of Place, E. Crocker
- ECON 277 Urban Economics, J. Brown
- EDUC 112/COMM 020 Transformative Schooling: Culture, Community, Education & Society, S. Michaels
- EDUC 152 Complexities of Urban Schooling, D. Wolf
- EDUC 220 Field Methods and Qualitative Research: Teaching and Learning in Urban Settings, D. Wolf, S. Michaels
- ENG 188 The City in American Literature, H. Roberts
- GEOG 030 Immigrants and the City: The World Comes to Worcester, S. Hanson
- GEOG 142 Cities and Culture: The American City, M. Bowden
- GEOG 159 Visions of the Modern Metropolis: The Marriage of Heaven and Hell, A. Merrifield
- GEOG 240 The End of America: Los Angeles, M. Bowden
- GEOG 244 Gender, Work and Space, S. Hanson
- GEOG 254 Car Trouble? (Urban Transportation), S. Hanson
- GEOG 280 Urban Ecology, D. Rocheleau

- GEOG 258 Utopian Visions, A. Merrifield
- GEOG 262 Introduction to Urban Geography, A. Merrifield
- GEOG 265 Modernism, Postmodernism and the City, A. Merrifield
- GEOG 280 Urban Ecology, D. Rocheleau
- I.D. 296 GIS & Local Planning, staff
- GOVT 172 Suburbia: People and Politics, S. Krefetz
- *GOVT 221 Urban Policy/ Seminar & Internship, S. Krefetz
- *GOVT 282 Seminar on Housing and Community Development Policies, S. Krefetz
- *HIST 203 Seminar in U.S. Urban History, A. Richter
- HIST 213 Gender and the City in the U.S., A. Richter
- *HIST 220 Community History, J. Greenwood
- *PSYCH 211 Laboratory in Community Psychology, J. McHale
- SOC 285 Poverty, R. Ross
- *SOC 299.9 Internships in Sociology (depending on the specific focus)
- SPANISH 117 Field Work in the Hispanic Community, C. Montross
- *indicates this course may be used to fulfill the capstone requirement

Group D: Comparative or International Urban Courses

- ARTHIST 114 Ancient Cities and Sanctuaries, R. Townsend
- ARTHIST 216 Architecture and Democracy, R. Townsend
- COMPLIT/ENG 288 Art of the City: Paris and New York, J. Conron and M. Spingler
- GEOG 242 Cities and Culture: The European City, M. Bowden
- *SOC 290 Cities in Global Perspective, R. Ross
- SOC 232 Population, Environment, and Development, B. London

WOMEN'S STUDIES

Program Faculty

Maria Acosta Cruz, Ph. D. Department of Foreign Languages and Literatures: Latin-American and Caribbean literature, nationalism, women and literature

Margarete Arndt, D.B.A Graduate School of Management: health care managements, women in the health care system

Kiran Asher, Ph.D. Department of International Development: community and environment; women and environment, biodiversity, Latin America

Parminder K. Bhachu Ph. D. Department of Sociology: cultural identities and global processes: British cultures, international migration and immigration, race, ethnicity, gender, culture, class and consumption

Mary Ellen Boyle, Ph.D. Graduate School of Management: gender in organizations

Marcia Butzel, Ph.D. Department of Visual and Performing Arts: film and cultural studies, comparative arts, feminist film theory

Carol C. D'Lugo, Ph.D. Department of Foreign Languages and Literatures: Latin-American literature, Spanish culture, Mexican women writers

Judith Wagner DeCew, Ph.D. Department of Philosophy: privacy, philosophy of law, social and political theory, feminist theories

Jacque L. Emel, Ph.D. Department of Geography: hydrology, social theory and nature, women's role in mineral industry restructuring, feminist critiques of the resource state

Cynthia Enloe, Ph.D. Department of Government and International Relations: women and politics, militarization, Asian and British politics, ethnic and racial politics

Patricia M. Ewick, Ph.D. Department of Sociology: research methods, gender and law, criminology

Rachel Joffe Falmagne, Ph.D. Department of Psychology: women, psychology and society, language and thought, semantic development, reasoning

Amy Froide, Ph.D. Department of History: women in European history, gender, class, and race in modern Britain, women in British history

Beth Gale, Ph.D. Department of Foreign Languages: girlhood and coming of age in French novels, French literature and society

SunHee Kim Gertz, Ph.D. Department of English: western European medieval literature, literary theory, characterizations of women

Eric Gordy, Ph.D. Department of Sociology: social theory, transitions to democracy, former Yugoslavia, sociology of media and popular culture

Bonnie Lee Grad, Ph.D. Department of Visual and Performing Arts: 19th and 20th century U.S. American and Western European painting, history of landscape art, women artists, Georgia O'Keefe

Janette T. Greenwood, Ph.D. Department of History: African-American history, southern history, Worcester history

Beverly C. Grier, Ph.D. Department of Government and International Relations: African politics, politics of land, women's and children's labor, African-American women

Laura Hammond, Ph.D. Department of International Development: community and environment, women in international humanitarian aid, Ethiopia, gender and social anthropology

Susan Hanson, Ph.D. Department of Geography: feminist geography, urban-social geography, transportation, local labor markets, women in Worcester

Serena S. Hilsinger, Ph.D. Professor emeritus, Department of English: Modernist literature, women writers, Virginia Woolf

Fern L. Johnson, Ph.D. Department of English: language, communication, and culture, with special emphasis on gender and race, feminist linguistics

Dorothy Kaufmann, Ph.D. *Department of Foreign Languages and Literatures: French women writers, Francophone literature worldwide*
Sharon Perlman Krefetz, Ph.D. *Department of Government and International Relations: urban politics, suburban politics, women and U.S. politics*

Deborah M. Merrill, Ph.D. *Department of Sociology: aging, family, medicine, and demography*
Winston Napier, Ph.D. *Department of English: African-American literature, critical theory, feminist literary theory*

Amy Richter, Ph.D. *Department of History: American women's history, women in cities, women and the railroad*

Heather Roberts, Ph.D. *Department of English: women in American culture and literature, nineteenth century American literature*

Dianne E. Rocheleau, Ph.D. *Department of Geography: gender and political ecology, landscape, forestry, environment and development in Africa, the Caribbean and New England*

Paul S. Ropp, Ph.D. *Department of History: Chinese social and intellectual history, women in Chinese society and literature*

Valerie Sperling, Ph.D. *Department of Government: Russian women's politics, women in political movements, feminist theories*

Shelly Tenenbaum, Ph.D. *Department of Sociology: Judaic studies, race/ethnicity, social stratification, Jewish women in the U.S. and Europe*

Barbara P. Thomas-Slayter, Ph.D. *Research Professor, Program of International Development: community organization, Third World women and public policy, rural development, gender and environment*

Virginia M. Vaughan, Ph.D. *Department of English: Shakespeare, Renaissance drama, non-dramatic Renaissance literature, women in the Renaissance England*

Kristen Williams, Ph.D. *Department of Government: women in international politics, national security, politics of globalization, ethnic conflict*

Visit our Clark University Women's Studies website for more information on individual faculty

Undergraduate and Graduate Programs

The Women's Studies Program at Clark was launched in 1979. It is broadly interdisciplinary and richly interconnected. It offers both an undergraduate B.A. concentration and a graduate Ph. D. degree. Women's Studies stresses the diversity of women's experiences within countries and around the world. Courses stress the importance of social ideas and relationships such as those shaped by gender, ethnicity, race and class, in order to gain understandings of individual and collective experiences, past and present.

Director: Jody Emel, Professor

Office: 1st floor, Carriage House (125 Woodland St.)

Women's Studies Library: 2nd floor, Carriage House. Administrative staff person: Joanne Ljungberg

Website: <http://www.clarku.edu/departments/womensstudies/>

Email: womenstudy@clarku.edu

Undergraduate B. A. Concentration

The Women's Studies undergraduate concentration may be taken along with any departmental major. It involves taking a total of six courses. Interested students may also self-design a women studies major, which must be approved by the Dean of the College, and the director of women's studies, and a committee of three women's studies faculty members.

Requirements for Women's Studies Concentration

Six courses:

- WS110: Introduction to Women's Studies (taken any year)
- Four additional courses listed as part of the Women's Studies Program (it is recommended that these include both social sciences and humanities.) Two of these courses should be at the 200 level

- A one-credit internship or special project, or advanced research seminar in Women's Studies. Internships have included: mentoring local girls in All Kinds Of Girls ("AKOG"); working for NOW in Boston or in Washington D.C; interning with a member of Congress or of the British Parliament. All internships include readings and a faculty supervisor

Come to the Carriage House, the Women's Studies Office, to sign up for your concentration, or to use the Women's Studies library, or to talk to the Women's Studies Director. Concentrators have special events coordinated with the student-run Women's Center, highlighted by International Women's Week every March.

Graduate Ph.D. Program

The Ph.D. Program was launched in 1992, as one of the first Women's Studies Doctoral programs in the entire United States. It is lodged within a broadly interdisciplinary and globally conscious Women's Studies Program. Faculty from disciplines across the University serve as advisors and dissertation supervisors. Scholarly and intellectual exchanges and collaboration across traditional disciplinary boundaries provide the context in which self-motivated graduate students can flourish. Graduate students take major responsibility for designing their programs and work together to exchange and develop ideas. Among Clark's Women's Studies doctoral students' interests have been: the life and work of Audre Lorde, American women's organizing across class, women's involvement in early 20th century advertising, African-American girlhood, the militarization of South Korean women, women's sustainable agriculture in China, feminist readings of science fiction, women and international peace-keeping in East Timor, and constructions of motherhood in post-colonial Trinidad.

Program Goals and Emphasis

The Ph.D. in Women's Studies is designed for future academics, as well as for activists and professionals in public policy and the private sector. Those with previous work in Women's Studies, as well as those having done gender-conscious academic work in traditional disciplines, are encouraged to apply.

Clark's program provides Ph.D. candidates with diverse theoretical and methodological approaches to prepare them to formulate their own approaches to the questions they choose to pursue. The Clark Women's Studies doctoral program is committed to diversity and a global awareness.

Women's Studies graduate students are encouraged to collaborate with other Clark graduate students working on gender: e.g., in International Development, Geography, Holocaust Studies, English, History and Psychology.

Women's Studies Ph.D. students must typically enroll in courses for a minimum of two years on campus before taking their doctoral Oral Exams. The time will be somewhat longer if the student begins the program without a Masters Degree. After passing the Orals, students prepare their dissertation proposal; they research, write their dissertations, typically over the next two years, climaxing in their Dissertation Defense.

Admission

Note: Admission to the program is for the Ph.D. While a Ph.D. student entering with only a B.A. degree will earn a Clark M.A. degree by reaching the Doctoral Orals Exam, there is no separate Women's Studies M.A. Program. Preferences in admissions will be given to applicants coming with a B.A. plus a completed M.A. Degree and/or a B.A. plus significant activist/professional experience in women's issues. Evidence of self-motivation will also be considered.

Applications to the program must include: official transcripts from one's BA and/or MA college/university; letters of recommendation; an essay describing one's women's studies research interests, past and future, relating those to one's academic, professional, and/or activist experience; and a sample of one's writing. Many Ph.D. students receive tuition-waivers and funded teaching assistantships. Contact the Program for application forms.

General Requirements of the Graduate Ph.D. Program

Clark requires a minimum of two years "residency" for all Ph.D. students: "residency" refers only to the students presence on Campus for courses and other programs activities; it does not require living in Worcester itself. After Passing one's Ph.D. orals, one may register for dissertation credits while conducting research off-Campus.

Sixteen units are required for the completion of the Ph.D. Of these, 13 must be taken at Clark. Three of the 16 credits will be waived if the graduate student enters the Clark Women's Studies program with an MA degree in Women's Studies or in a field related to Women's Studies. Eight of the total 16 credits must be in Women's Studies. All courses must be taken at the 300-level. However, if there is an advanced 200-level course listed and the graduate students get permission from the professor to take that course as a 300-level, extra work must be done and the graduate student must register for that course under a 300 number.

The Ph.D. Core - 5 credits

- (WS 300.1 and WS 300.2) Graduate 2-part Proseminar in Women's Studies (2 semesters, 2 units) All students are required to take these two course. Offered every other year.
- (WS 301.1 and WS 301.2) Foundations of Feminist Inquiry, 2-parts (2 semesters, 2 units) All students are required to take these two courses. Offered every other year in rotation with WS 300.
- (WS 302) Graduate Research Colloquium in Women's Studies (1 unit) All students are required to participate in this colloquium

over four semesters, joining with graduate students in supportive discussions of each other's Women's Studies research. Graduate students entering program with only a B.A. degree are required to make two(2) colloquia presentations: the first should be accompanied by a formal written paper; if determined by WS faculty to be of publishable quality this will serve as the students M.A. qualifying paper. The student receives the required one (1) credit on that semester in which they present to the colloquium their own research.

Resources

The Clark University Women's Studies Program is part of the Worcester Consortium in Women's Studies, comprised of seven institutions of higher education, each with their own faculty active in Women's Studies research and teaching. Worcester also has non-University institutions of value to Women's Studies students and faculty: the Worcester Ecotarium; the Worcester Art Museum; the Worcester Historical Museum; the American Antiquarian Society; girls inc.; Daybreak, a shelter for battered women; and the Worcester Rape Crisis Center. The Clark Women's Studies faculty members maintain ties with colleges, universities, and research centers on women in both the Boston and Amherst areas, such as the Bunting Institute of Radcliffe/Harvard, the Wellesley Center for Research on Women, and the Five College (Smith, Amherst, Hampshire, Mount Holyoke, University of Massachusetts) Women's Studies Research Center.

Resources available in the area include: Clark University Goddard Library; the Clark Marsh Library on Development and Environment; the American Antiquarian Library of U.S. Colonial History; the Harvard/Radcliffe Schlesinger Library of the History of American, and New Words, the feminist bookstore, both in nearby Cambridge. Clark's Women's Studies doctoral program is a member of the international network, the National Council for Research on Women; it is also a member of the National Women's Studies Association.

Courses

In addition to courses offered by the undergraduate college and listed below, Women's Studies undergraduate concentrators and graduate students may enroll in selected courses offered by the College of Professional and Continuing Education (COPACE).

COPACE provides a diverse list of courses that is revised each year and is enriched by collaborations with various cultural institutions in Worcester. Contact the registrar in COPACE directly for current academic year and summer offerings: www.copace.clarku.edu

Numbering: Undergraduate courses are from 100 through 200. Graduate credited courses are both 200/300 and 300.

110 INTRODUCTION TO WOMEN'S STUDIES

In this course we will explore the ways in which ideas about femininity and masculinity have shaped women's lives - locally and globally, in the present and historically - and how some women have challenged, even transformed, those meanings and the social relationships that flow from those two potent ideas. Among the topics that may be considered are: beauty, war, sports, politics, women's movements, sexuality, race, work, violence, fashion, family, globalization, feminism, creativity, religion, media, and girlhood. In the fall of 2002, Intro to WS will be taught by Prof. Enloe, and will be cross-listed with Government. Every year thereafter, Intro to WS will be taught in rotation by one of the following faculty: Prof. Sperling (Gov.), Prof. Ewing (Soc.), Prof. Richtger (Hist.), and Prof. Gale (For. Langs.). The course will ALWAYS count as WS, but each fall it will ALSO be cross-listed for credit in the home department of the professor then teaching it. This course is open to all students in All majors. No prerequisites.

120 INTRO TO SOCIAL ANTHROPOLOGY

This course provides an introduction to social/cultural anthropology's theories and methodologies through study of its principle

medium of analysis, the ethnography. Students will explore several different types of cultural study: hunter-gatherers in Central Africa, gender relations in a Middle Eastern society, and contemporary problems in American inner cities. Anthropological approaches to study of power, identity, social structure, religion, ethnicity, economics and development will also be discussed. Students learn the methods of anthropological research first-hand through conducting their own fieldwork projects.. (See ID 120)Ms. Hammond/ Offered every year

133 SURVEY OF WOMEN WRITERS I

Authors studied include Behn, Burney, Austen, Bronte, Eliot, Gilman, and Chopin. The emphasis is on these British and America female authors and their characters' reactions to, and interactions with, the atmospheres and landscapes of their respective ages. Prerequisite: verbal expression course. Staff/Offered every other year

134 SURVEY OF WOMEN WRITERS II

Covers works written in the 20th century that provide portraits of women in all stages and conditions of life, rendered in a broad spectrum of fictional techniques. The selection of authors and work is based on three major concerns: that it represent a chronological span, that it preserve a certain thematic coherence, and that it allow ample opportunity for discussion of aesthetic matters. Authors include Stein, Mansfield, Woolf, Bowen, Hurston, Porter, Sartre, and Naylor. Prerequisite: verbal expression course. Staff/Offered every other year

136 GENDER AND ENVIRONMENT

Explores how gender is reflected in the landscape, in our settlement and land-use patterns, in environmental history, and in our present ecological science and practice from the global to the local level. Combines lectures, readings, discussions, films, and local field trips. Reviews feminist and other alternative explanations of the gendered nature of knowledge, access, use

and control of space and resources in a variety of environments past, present, and possible. Regional focus on New England. Ms. Rocheleau/Offered every year

147 WORLD ORDER AND GLOBALIZATION

See Government 147. Ms. Williams/Offered every year

150 INTRODUCTION TO MEDIEVAL LITERATURE

Introduces Western European medieval literature, exploring women in the classical roots and contemporary counterparts in the process. Themes vary each year and include: rhetoric and romance in medieval literature; narratology; the shrinking stage in Western literature; the epic hero and the lady lover; and Ovid in the Middle Ages. Students may repeat the course provided they study a different theme each time. Ms. Gertz/Offered every year

175 WOMEN AND U.S. POLITICS

Explores the political attitudes, behavior, and status of women in the U.S. Views on the nature of women and their "proper" role in society and the government, set forth by classical political philosophers in ancient times, are contrasted with ideas introduced by women's rights theorists, beginning in the 18th century. Focus is on contemporary U.S. politics, including: gender differences in political socialization and political participation, the "gender gap" in voting preferences, women as politicians and bureaucrats, and the influence of women on public policies. Ms. Krefetz/Offered every other year.

176 THE FAMILY

Examines the assumed collapse of the American family and the causes of this collapse. Also examines challenges to the new family, such as dual-career couples and the resulting division of labor in the home. Working class, African-American, and homeless families are also discussed. Staff/Offered every year

184 LANDSCAPE AS REVELATION: ART OF GEORGIA O'KEEFE

Examines cultural and geographic issues through focus on Georgia O'Keefe's work. Like many 20th century modernists, she turned away from the technological urban world to search for elemental landscapes. From her experiences of the southwestern desert and the rituals of Hispanic and Native American cultures, she forged a spiritual art with moral importance that was unique in its time. Readings include Thoreau, Emerson, Paul Tillich, Willa Cather, Mabel Dodge Luhan, Ruth Benedict, and Mircea Eliade. Ms. Grad/Offered every other year

208 COMPARATIVE POLITICS OF WOMEN

Explores the motivations, goals, strategies, and ideas of women who have created women's movements in countries ranging from Egypt and China to Britain and Argentina. Ms. Enloe/Offered every other year

210 COMING OF AGE IN THE FRENCH NOVEL

See French 210. Ms. Gale/Offered periodically

213 GENDER AND THE CITY IN THE U.S.

Focusing on the 19th and 20th centuries, the course examines where American urban life for men and women diverged and where it met. Readings on men, women, and urban space, reform movements, utopian ideals, and other topics are followed by student research projects using local resources. Ms. Richter/Offered periodically

219 HISTORY OF AMERICAN WOMEN

Examines the female experience in the U.S., focusing on issues of power, race, ethnicity, and class, and concepts of work, family, and gender, with the ramifications for the world of both sexes. Fulfills the historical perspective requirement. Ms. Richter/Offered every year

224 AFRICAN-AMERICAN WOMEN

Examines historical experiences of African-American women from the period of slavery to the present. Examines their roles in economy

and politics, resistance to racial and sexual oppression, and historical relationship to white women's movements. Comparisons are made between black women's experiences in the U.S., the Caribbean, and South Africa. Grier/Offered every other year

228 COMPARATIVE POLITICS OF RACE, ETHNICITY, AND GENDER

Explores how the politics of "ethnicity" and "race" are shaped by controversies and stereotypes about both "femininity" and "manliness" for groups such as Asian-Americans, black Britons, Latin American Indians, Rwandans, Bosnians, and others in both industrialized and Third World countries. Ms. Enloe/Offered every other year

237 FEMINISM, NATURE, AND CULTURE

An in-depth study of feminist theories of science, rationality, and morality as they apply to nature-society relations. The cultural politics of nature across time and space are examined. Film, literature, government reports, and academic writing are used to show how images and truths about nature and society are constructed. Ms. Emel/Offered every other year

242 FEMINIST CRITICAL THEORY/SEMINAR

Focuses on the canon of postmodern feminist literary theory produced by the African-American feminist/womanist school, the écriture feminine school, the Canadian Freudian school, and the American generalist school. Target issues include authorial power and revisionary identities, body as text, deconstruction as feminist practice, principles of psycho-political liberation, racialized gender, and resistance to the universalizing traditions of phallogocentrism. Mr. Napier/Offered every other year

244 GENDER, WORK, AND SPACE/SEMINAR

How do gender, race, class, and ethnicity propel people into certain types of work? What role do location and space play in shaping and sustaining such divisions? Why do women, youth, and minorities hold jobs that are distinctly different from other workers jobs? How

can a geographic understanding of gender, class, and ethnicity help explain the current restructuring of the global economy? How effective have women been (or can they be) in organizing to improve their economic and social status? Materials focus on local and global urban industrialized settings. Ms. Hanson/Offered Periodically

247 WOMEN IN SOCIETY

Examines women's psychological functioning and development in broad societal context to foster a broadly based understanding of, and clarify interactions between, the cultural, historical, economic, and institutional factors. Discusses anthropological and sociological examinations of women's cultural status in various societies, and of economic, historical, and symbolic factors impinging on the individual. Studies women's personal development, life issues, intellectual functioning, power, and roles in society. Ms. Joffe Falmagne/Offered every other year

248 WOMEN AND ART

Explores the history of women artists and the nature of their professional involvement in the art institutions of their day. It explores women as subjects in art, femininity and masculinity as cultural constructs, the concept of genius as myth, and the nature of objectivity. Readings include Linda Nochlin, Thalia Gouma-Peterson, Lucy Lippard, Rozsida Parker and Griselda Pollack, and John Berger. Ms. Grad/Offered periodically

249 SIGNS AND CROSSROADS: SEMIOTIC THEORY AND PRACTICE

Approaches semiotic theories comparatively from a historical point of view, as well as from a theoretical point of view that breaks them down into three different schools (American, French, and Italian). In addition to learning about semiotic theories, the student is also able to practice them in a comparative mode; use in areas such as literature, film, advertising, and drama is addressed and analyzed. Ms. Gertz/Offered periodically

250 MEDIEVAL LITERATURE

Emphasizes literary theory as well as literature of the Middle Ages. Attempts to achieve a sense of gendered medieval literary culture and uses texts from Europe and Great Britain as well as from the classical period. Texts vary each time the course is offered. Ms. Gertz/Offered every other year

251 CHAUCER/SEMINAR

Guides the student through Book of the Duchess, The House of Fame, The Parliament of Fowls, some Canterbury Tales, and Troilus and Criseyde, exploring ideas and ideals of womanhood and manhood. All texts are taught in Middle English, and selections may vary. (No prior knowledge of Middle English required.) Ms. Gertz/Offered every other year

254 STILL SPACES: EAST MEETS WEST—COMPARATIVE PRACTICE IN THE CLASSROOM

Probes how women are represented in translated, primary texts from 17th- and 18th-century China and from 12th through 14th century medieval Western Europe. Secondary texts and illustrations will be examined theoretically, literally, and historiographically. Explores how representations work with stereotypes and whether they have relevance today. Prerequisites: An Asian or western literature course. Ms. Gertz and Mr. Ropp/Offered periodically

255 STUDIES IN THE RENAISSANCE

Explores the poets, playwrights, and prose writers who shaped the English literary Renaissance. Authors may include Thomas More, Philip Sidney, Edmund Spenser, Christopher Marlowe, Mary Wroth, John Donne, William Shakespeare, Elizabeth Cary, George Herbert, Ben Johnson, Thomas Middleton, and John Webster. Their writings are placed in the gendered sociopolitical context of the 16th and 17th centuries. Prerequisite: permission of the instructor. Ms. Vaughan/Offered every other year

256 EDUCATION IN THE FRENCH NOVEL

See French 256. Offered in English. Ms. Gale/Offered periodically

257 WOMEN AND WORK IN PRE-INDUSTRIAL EUROPE

See History 249. Ms. Froide

258 WOMEN IN JEWISH CULTURE

Uncovers the experience of Jewish women, using gender analysis to enrich understanding of Jewish life. Critical questions about the status of women in texts, rituals, and communal practices from the biblical period to the present will be raised. Ms. Tenenbaum/Offered every other year

261 SEMINAR: WOMEN AND MILITARIZATION IN A COMPARATIVE POLITICS PERSPECTIVE

Does the process by which any country's military grows in influence shaped by its ideas about "masculinity" and "femininity"? What do women's experience in wartime and peacetime reveal about military politics? What do we expose about militaries when we look behind various countries' governments' policies to use women as mothers, wives, workers, or prostitutes? Do racial and economic differences shape a military's sexual division of labor? Previous history, government or women's studies courses recommended. Limited to juniors, seniors, and graduate students. Ms. Enloe/Offered every other year

271 RACE, MIGRATION, GENDER, AND ETHNICITY

Examines migration patterns and the impact of migration on ethnicity from the perspectives of gender and race. Focuses on the impact of the economic on the cultural, as examined through the impact of migration and women's engagement in the wage-labor market. Explores changes in the sexual division of labor within the household and new cultural patterns for women. Emphasis is placed on the importance of class, ethnicity, and race in the formation of gendered ethnic cultures, and formation of ethnic identities as they are influenced by local economic and political factors. Ms. Bhachu/Offered every other year

275 GENDER AND GLOBAL CHANGE

See ID 285. Staff /Offered every other year

277 GENDER, ENVIRONMENT, AND DEVELOPMENT

Considers the gender division of control, responsibility, knowledge, labor, and benefits in the definition, use, management, and protection of natural resources in developing countries. Readings, lectures, and discussion focus on the distinct perspectives and concerns of women and men as actors in natural resource use and management and in local, regional, and global ecological transformations. Ms. Rocheleau/Offered every other year

282 CHINESE WOMEN IN LITERATURE AND SOCIETY

Examines the changing role of women in Chinese society from the 17th century to the present, primarily through the reading and discussion of Chinese literature in English translation. Mr. Ropp/Offered every other year

286 ADVANCED TOPICS IN COMPARATIVE POLITICS

This seminar rotates between two global topics: 1) International feminist thinking and 2) Women and the state. Open to graduate students and juniors and seniors. Can be taken twice if the topics are different. Ms. Enloe/Offered periodically

288 GENDER AND FILM

Explores the ways that gender is produced by the social technologies of film and video. We will consider how concepts of gender difference organize representation, narrative, and spectatorship in Hollywood and alternative cinema. Course readings will be theoretical and critical, featuring the contributions of feminist film scholars and critics. Prerequisite: 101 or permission of the instructor. Ms. Butzel/Offered every other year

292 GLOBAL ETHNOGRAPHIES

Focuses on emergent ethnographic concerns that attempt to capture fluid cultural processes and connections as they unfold in late-1990's

global arenas. Deals with multiple-sited ethnography of movement, displacement, and replacement, and the global traffic in culture. Analyzes "traditional" ethnographies and ethnographic methods of the founding pioneers - including the work of the famous Clark University ethnographer, Franz Boas. The conventional ethnographic mode of an intense focus on a single site - often in recent times analyzed in relation to a world system - is no longer a viable method. So how can we examine transnational connections and commodity circuits that most of us are a part of in the late 20th century? What methods of "tracking" can we implement to capture these fluid domains and borderless cultural and economic spaces? Indeed, how can we develop ethnographic methods of observation that can follow the object, trace cultural and consumer trends and track political events, influential persons, news media items and document their global impacts on local sites. Ms. Bhachu/Offered every other year

294 HISTORY OF THE ENGLISH LANGUAGE

Examines changes in English during the Anglo-Saxon, medieval, and early modern periods. In addition to learning phonological and grammatical characteristics of the language during each period, the student examines language as a mirror of culture. Ms. Gertz/Offered periodically

295 GENDER AND DISCOURSE

Focuses on ways in which biological sex is culturally elaborated into gender patterns in language use. Consideration is given to a range of conversational and rhetorical factors that reveal gender identity. Discussion of race, ethnicity, and social position, as well as the impact of gendered discourse for situations such as the classroom, courtroom, boardroom, and medical examination room. Ms. Johnson/Offered every year

296 INTERNSHIP SEMINAR: GENDER

Ms. Tenenbaum/Offered periodically

299 UNDERGRADUATE DIRECTED READINGS IN WOMEN'S STUDIES (TUTORIAL)**299.1 UNDERGRADUATE DIRECTED RESEARCH IN WOMEN'S STUDIES (TUTORIAL)****299.2 UNDERGRADUATE SPECIAL PROJECT IN WOMEN'S STUDIES (TUTORIAL)****299.9 UNDERGRADUATE INTERNSHIP IN WOMEN'S STUDIES (TUTORIAL)****300.1 AND 300.2 GRADUATE PROSEMINAR IN WOMEN'S STUDIES (2 CREDITS)**

Surveys theoretical analysis and empirical research on women in societies and cultures, cultural representations of women, and women's individual functioning and development. Draws on expertise of program faculty and introduces all three areas of concentration. Reflects interdisciplinary linking and fosters integration between theoretical perspectives and between levels of analysis. Topics include women and economic development; women, societies, and the political process; women's history and diversity; the gendering of social institutions and of labor practices; sociolinguistic, semiotic and cognitive analysis of language, gender, and power; the social construction of gender, self, and identity; feminist perspectives on diversity and difference; and representation of women in the arts. Topics vary yearly. Mandatory. Staff/Offered every other year

301.1 AND 301.2 FOUNDATIONS OF FEMINIST INQUIRY

Reviews recent theoretical analysis and methodological issues pertaining to feminist inquiry in the humanities and social sciences. Provides an interdisciplinary analysis of theories of gender and the relations between gender and power. The approaches surveyed will reflect alternative theoretical perspectives and

span literary and cultural theory, social and political theory, feminist epistemology, theories of differences, and theories of individual development. Mandatory. Staff, Offered every other year in rotation with WS 300

302 GRADUATE RESEARCH COLLOQUIUM IN WOMEN'S STUDIES (1 CREDIT)

Taken by graduate students during all of their four on-campus semesters. Students present research-in-progress. If the graduate student enters without their Masters Degree, she/he will present two (2) colloquia presentations: the first will serve as her/his MA qualifying paper. The PhD presentation should be on research related to the dissertation proposal. Students formally register for the course during the semester they expect to present. During the semester, they do not present they will attend as participants. Offered every semester. Mandatory.

303 SOCIAL ANALYSIS & ACTION-NORTH AND SOUTH

Focuses on a critical concern for this century - the enduring inequalities that plague much of the world's population. With the scale of human poverty increasing in the context of new-liberal discrimination in all forms - whatever their basis - bear close examination. This course in social relations analysis explores the patterns and trends creating and maintaining disadvantage; it identifies approaches to social impact assessment (SIA), and enables students to work in teams to assess the structures, processes and politics of disadvantage in a specific social system. Staff /Offered every other year

305 FEMINIST FILM THEORY AND CRITICISM

Explores the emergence of feminist film criticism and its subsequent elaboration in semiotics, psychoanalysis, marxism, and poststructural approaches to culture. Emphasizes on

understanding the role of critical theory in feminist analysis of contemporary culture, particularly film and television texts. Reading includes Freud, Foucault, Lacan, Metz, Mulvey, de Lauretis, and Doane. Students will analyze film, video, and television texts in weekly screenings and discussions. Open to advanced undergraduates with permission. Ms. Butzel/Offered periodically

326 FEMINIST PERSPECTIVES ON MIND, SELF, IDENTITY, AND DEVELOPMENT

Surveys several approaches that examine how self, mind, and identity are constituted and develop in societal context, with particular focus on gender as one category of analysis, both discursive and material. Selected works illustrating these different perspectives as well as some of their current debates will be studied. Prerequisite: permission. Ms. Falmange/Offered periodically

335 FEMINIST GEOGRAPHY/SEMINAR

Explores the intersection of feminism and geography. Topics include feminist theory, epistemological questions in feminist geography, social movements, welfare politics and the state, and work. Ms. Hanson/Offered every other year

343 FEMINIST CRITICAL THEORY

See WS242. Mr. Napier/Offered periodically

347 WOMEN IN SOCIETY

See WS 247 Ms. Joffe Falmagne/Offered every other year

349 SINGS AND CROSSROADS IN SEMIOTIC THEORY

See WS 249. Ms. Gertz/Offered periodically

350 MEDIEVAL LITERATURE

See WS 250. Ms. Gertz/Offered periodically

351 CHAUCER

See WS 251 Ms Gertz/ Offered periodically

353 THIRD WORLD WOMEN AND GENDER IN ECONOMIC DEVELOPMENT

See IDCE 354

355 THIRD WORLD WOMEN AND GENDER IN ECONOMIC DEVELOPMENT

How did "third world women" and "gender" concerns enter economic development discourses? How have "third world women" and "gender" been conceptualized within development practices? In turn, how have feminist theories about women and gender shaped economic development discourses? In exploring these issues, this graduate seminar will eschew the divide between "theory" and "praxis" that plagues development literature.

357 WOMEN AND WORK IN PRE-INDUSTRIAL EUROPE

See WS 257. Ms. Froide/Offered every other year

359 HUMANITARIAN ASSISTANCE IN CONFLICT/POST CONFLICT SITUATIONS

See IDCE 359. Ms. Hammond

361 WOMEN AND MILITARIZATION IN A COMPARATIVE POLITICS PERSPECTIVE

See WS 261 Ms. Enloe/Offered every other year

386 ADVANCED TOPICS IN COMPARATIVE POLITICS

See WS 286 Ms. Enloe/Offered periodically

389 WOMEN IN THE HEALTH CARE SYSTEM

Explores the position and role of women in the U.S. health care system. It focuses at the aggregate level on women as patients, providers of health care, research subjects, and managers in health care. Each topic is reviewed and discussed based on its implications for the process and content of health care management or health policy. Exposes students to literature that conceptualizes women in their various roles in the health care system and how the system identifies and meets women's need for health services. Prerequisites: MHA 320; MBA 330. Ms. Arndt/Offered every other year

394 HISTORY OF THE ENGLISH LANGUAGE

See WS 294 Ms. Gertz/Offered periodically

395 GENDER AND DISCOURSE

See WS 295 Ms. Johnson/ Offered every year

**399.1 GRADUATE DIRECTED READINGS IN
WOMEN'S STUDIES (TUTORIAL)**

Staff/Offered every semester

**399.2 GRADUATE DIRECTED RESEARCH IN
WOMEN'S STUDIES (TUTORIAL)**

Staff/Offered every semester

**399.3 GRADUATE DIRECTED WRITINGS IN
WOMEN'S STUDIES (TUTORIAL)**

Staff/Offered every semester

**399.4 GRADUATE SPECIAL PROJECT IN WOMEN'S
STUDIES (TUTORIAL)**

Staff/Offered every semester



Directory



FULL-TIME INSTRUCTIONAL FACULTY

Maria I. Acosta Cruz, Ph.D., Associate Professor of Spanish. B.A., University of Puerto Rico, Mayaguez, 1978; M.A., State University of New York, Binghamton, 1980; Ph.D., 1984. (1986-)

Michael E. Addis, Ph.D., Associate Professor of Psychology. B.A., University of California, Berkeley, 1987; Ph.D., University of Washington, Seattle, 1993. (1995-)

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- Scott Hendricks, Ph.D.**, Assistant Professor and George F. Kneller Chair in Philosophy. B.A., Brigham Young University, 1993; M.A., University of Arizona, 1997; Ph.D., 2001. (2001-)
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- Linda M. Kennedy, Ph.D.**, Associate Professor of Biology; Adjunct Associate Professor of Psychology. A.B., Simmons College, 1975; R.N., Ph.D., Harvard University, 1979. (1983-)
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- Benjamin M. Korstvedt, Ph.D.**, Assistant Professor of Music. B.A., Clark University, 1987; Ph.D., University of Pennsylvania, 1995. (2002-)
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ACADEMIC CALENDAR 2002-2003



FALL 2002

Aug. 21-22	Early and international student orientation
Aug. 23-27	Orientation for all new students
Aug. 27	Residence halls open at 9 a.m. for returning students
Aug. 27	Registration for all new students; clearance day for continuing undergraduate students
Aug. 27	Orientation for all new graduate students
Aug. 28	First day of classes - Monday schedule; Convocation at 4 p.m.
Sept. 2	Labor Day - no classes
Sept. 11	Course Summary Form due; Last day to drop a course or add a course without petition
Sept. 27-29	Family Weekend
Oct. 12-15	Mid-term break - no classes
Oct. 28-Nov. 8	Course selection for Spring 2003
Nov. 1	Mid-term grades for First-year students distributed; Last day to withdraw from a class in the undergraduate college
Nov. 27-29	Thanksgiving recess
Dec. 11	Last day of classes
Dec. 12-15	Reading days
Dec. 16-19	Final exams
Dec. 20	Exam make-up day
Dec. 20	Residence halls close at 5 p.m.

SPRING 2003

Jan. 2	Fall semester grades due from instructors to Student Records office
Jan. 12	Residence Halls open at 9 a.m.
Jan. 13	Clearance Day for new and continuing undergraduate students
Jan. 14	First day of classes
Jan. 28	Course Summary Form due; Last day to drop a course or add a course without petition.
March 1-9	Mid-term break
March 28	Mid-term grades for first-year students distributed; Last day to withdraw from a class in the undergraduate college
April 7-18	Course selection for Fall 2003
April 25	Academic Spree Day
April 28	Last day of classes
April 29-30	Reading days
May 3-4	Reading days
May 1-2, 5-6	Final exams
May 7	Residence halls close at 5 p.m. for all students except graduating seniors
May 8	Grades due for seniors
May 18	Commencement
May 19	Residence halls close at noon for graduating seniors
May 20	All grades due to Student Records
May 26	Memorial Day
June 2	Final grades mailed to student's home residence

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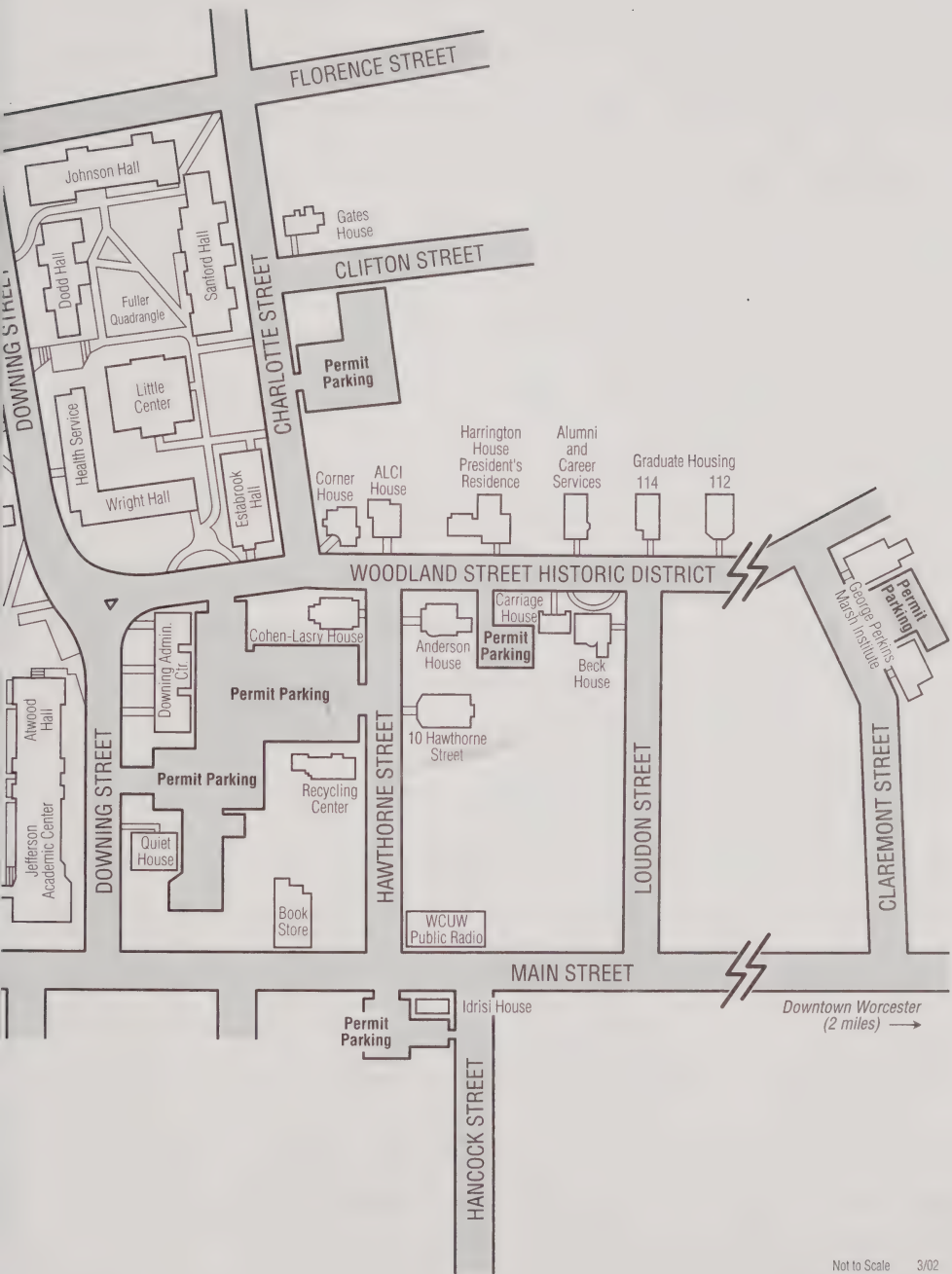
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